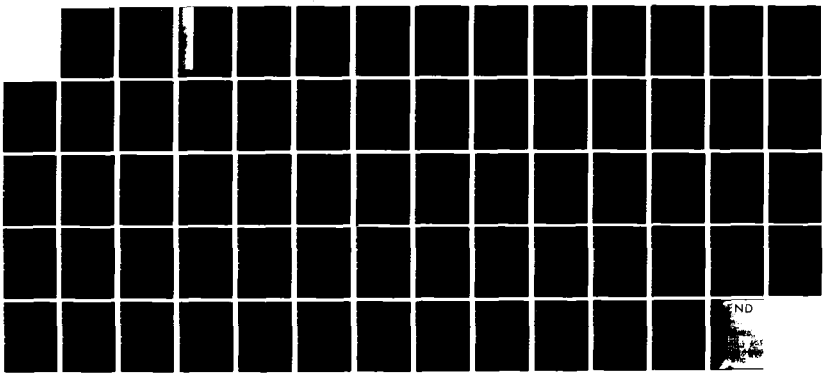
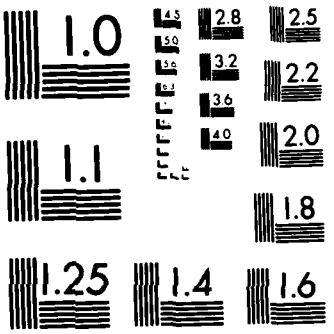
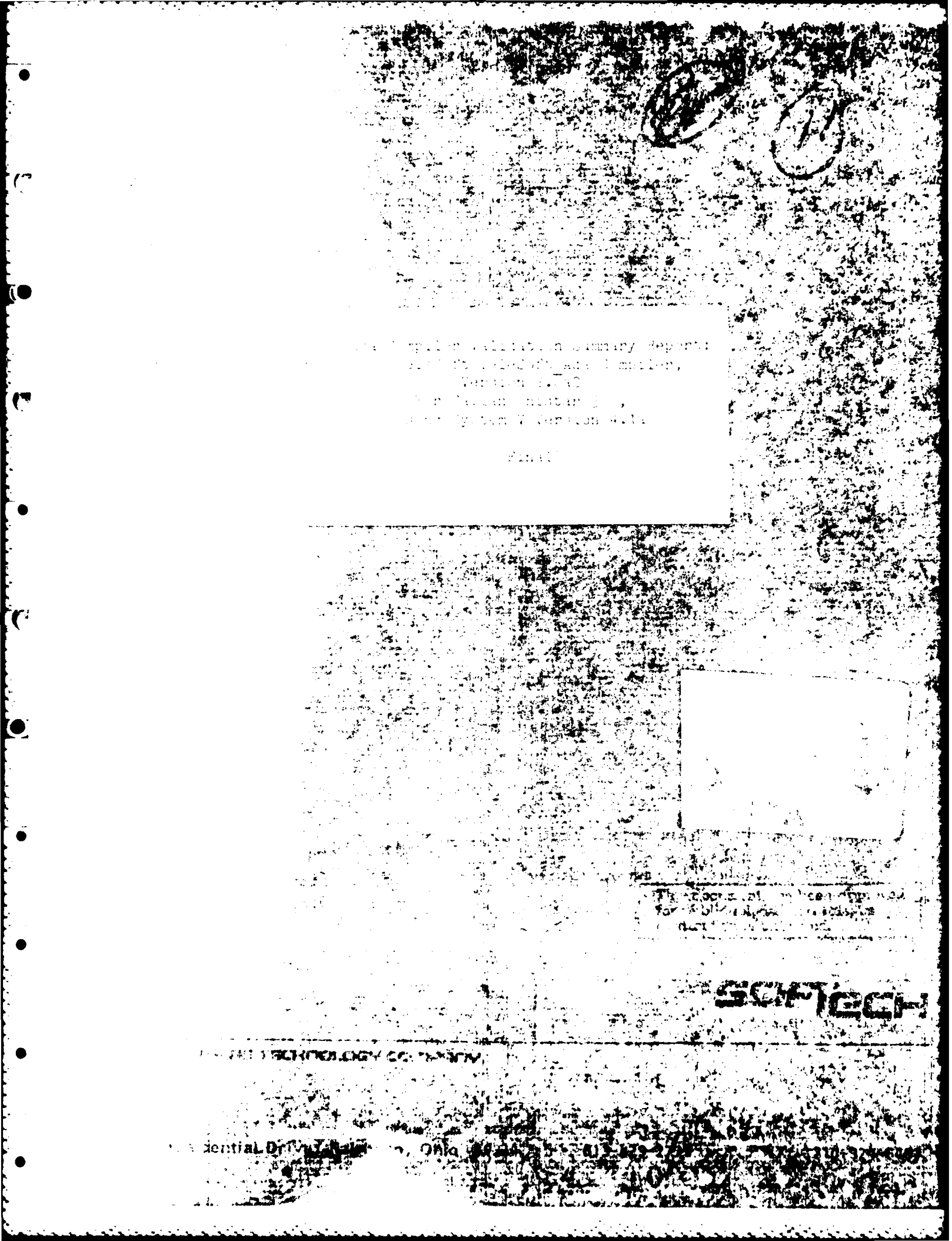
AD-A147 115 ADA COMPILER VALIDATION SUMMARY REPORT: TELESOFT (TELESOFT ADA) COMPILER..(U) SOFTECH INC FAIRBORN OH 10 AUG 84 3285-2-15.2 F33600-84-D-0280 1/1

UNCLASSIFIED F/G 9/2 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



SOFTECH

THE SOFTWARE TECHNOLOGY COMPANY

(11)

AVF Control Number: AVF-TAR-02.0884

Ada Compiler Validation Summary Report:
TeleSoft TeleSoft Ada Compiler,
Version 2.0a2
For Callan Unistar 300,
Using System V Version 4.1a

(Final)

Contract F33600-84-D-0280

3285-2-15.2

10 August 1984

DTIC
ELECTE
OCT 1 7 1984
A

Prepared for:

Ada Validation Facility (ASD/ADOL)
Computer Operations Division
ASD Computer Center
Wright-Patterson AFB OH 45433

This document has been approved for public release and sale; its distribution is unlimited.

Prepared By

SofTech, Inc.
3100 Presidential Drive
Fairborn, OH 45324

84 10 12 199

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1 REPORT NUMBER: AVF-VAR-02.0884	2 GOVT ACCESSION NO. / 3 RECIPIENT'S CATALOG NUMBER
4 TITLE (and Subtitle): Ada Compiler Validation Summary Report Telesoft TeleSoft Ada Compiler Version 2.0a2 for Callan Unistar 300, using System V Version 4.1a	5 TYPE OF REPORT & PERIOD COVERED: 24 June 84 - 26 June 84
	6 PERFORMING ORG. REPORT NUMBER: ~~AVF-TAR-02.0884~~
7 AUTHOR(s): Softech, Inc.	8 CONTRACT OR GRANT NUMBER(s): F 33600-84-D-0280
9 PERFORMING ORGANIZATION NAME AND ADDRESS: SofTech, Inc. 3100 Presidential Drive Fairborn, OH 45324	10 PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11 CONTROLLING OFFICE NAME AND ADDRESS: Ada Validation Facility (ASD/ADOL) Computer Operations Division/ASD Computer Center Wright-Patterson AFB, OH 45433	12 REPORT DATE: 10 August 1984 / 13 NUMBER OF PAGES
14 MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)	15 SECURITY CLASS. (of this report): Unclassified / 15a DECLASSIFICATION/DOWNGRADING SCHEDULE
16 DISTRIBUTION STATEMENT (of this Report): Approved for public release; distribution unlimited	
17 DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report): Unclassified	
18 SUPPLEMENTARY NOTES: Final Version	
19 KEY WORDS (Continue on reverse side if necessary and identify by block number): Ada language, Ada Compiler Validation Capability, validation tests, ACVC, Validation Summary Report, Telesoft Compiler Version 2.0a2, Callan Unistar 300.	
20 ABSTRACT (Continue on reverse side if necessary and identify by block number): This report describes the results of the validation effort for the TeleSoft TeleSoft Ada Compiler version 2.0a2, for the Callan Unistar 300, using System V Version 4.1a, tested with version 1.3 of the Ada Compiler Validation capability.	

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-LF-014-6601

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

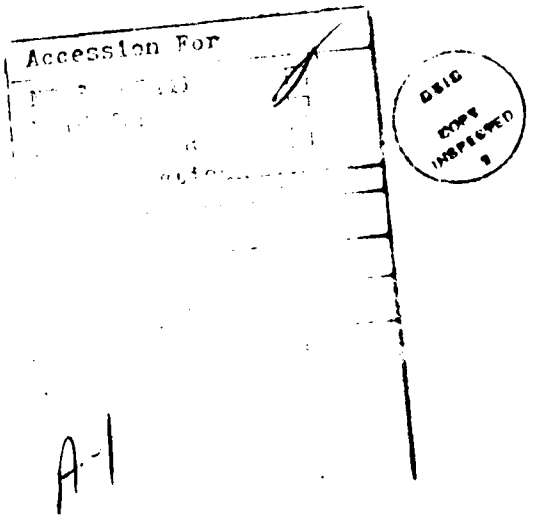
84 10 12 199

This report has been reviewed and is approved.

David A. Sykes
SofTech, Inc.

Patricia A. Knoop
Ada Validation Facility
ASD/ADOL Wright-Patterson Air Force Base

Robert F. Mathis
Director, AJPO



ABSTRACT

The TeleSoft Compiler (TeleSoft Ada), version 2.0a2, for the Callan Unistar 300, using System V Version 4.1a, was tested with version 1.3 of the Ada Compiler Validation Capability (ACVC) validation tests. Version 1.3 of the test suite contained 1989 tests, of which 1668 were applicable to this implementation. Of the applicable tests, 61 were withdrawn due to errors in the tests. All of the remaining 1607 applicable correct tests were passed.

CONTENTS

CHAPTER 1 INTRODUCTION

1.1 PURPOSE OF THE VALIDATION SUMMARY REPORT 1-1
1.2 USE OF THE VALIDATION SUMMARY REPORT 1-2
1.3 REFERENCES 1-2
1.4 DEFINITIONS OF TERMS 1-3

CHAPTER 2 TEST ANALYSIS

2.1 CLASS A TESTING 2-2
2.1.1 Class A Test Procedures 2-2
2.1.2 Class A Test Results 2-2
2.2 CLASS B TESTING 2-2
2.2.1 Class B Test Procedures 2-2
2.2.2 Class B Test Results 2-3
2.3 CLASS C TESTING 2-3
2.3.1 Class C Test Procedures 2-3
2.3.2 Class C Test Results 2-3
2.4 CLASS D TESTING 2-4
2.4.1 Class D Test Procedures 2-4
2.4.2 Class D Test Results 2-4
2.5 CLASS E TESTING 2-4
2.5.1 Class E Test Procedures 2-4
2.5.2 Class E Test Results 2-4
2.6 CLASS L TESTING 2-5
2.6.1 Class L Test Procedures 2-5
2.6.2 Class L Test Results 2-5

CHAPTER 3 COMPILER NONCONFORMANCES

CHAPTER 4 ADDITIONAL INFORMATION

4.1 COMPILER PARAMETERS 4-1
4.2 TESTING INFORMATION 4-2
4.2.1 Pre-Test Procedures 4-2
4.2.2 Control Files 4-2
4.2.3 Test Procedures 4-2
4.2.4 Test Analysis Procedures 4-3
4.2.5 Performance Information 4-3
4.2.6 Description Of Errors In Withdrawn Tests 4-3
4.2.7 Description Of Inapplicable Tests 4-5
4.2.8 Information Derived From The Tests 4-7

CHAPTER 5 SUMMARY AND CONCLUSIONS

APPENDIX A COMPLETE LIST OF TESTS AND RESULTS

CHAPTER 1

INTRODUCTION

1.1 PURPOSE OF THE VALIDATION SUMMARY REPORT

This report describes the results of the validation effort for the following Ada translator:

Host Machine:	Callan Unistar 300
Operating System:	System V Version 4.1a
Host Disk System:	two 5 1/4 inch Winchester
Target Machine:	Callan Unistar 300
Operating System:	System V Version 4.1a
Language Version:	ANSI/MIL-STD-1815A Ada
Translator Name:	TeleSoft_Ada
Translator Version:	2.0a2
Validator Version:	1.3

Testing of this translator was conducted by SofTech, Inc. under the supervision of the Ada Validation Facility (AVF), at the direction of the Ada Joint Program Office. Testing was conducted from 24 Jun 84 through 26 Jun 84 at TeleSoft, Inc., San Diego CA in accordance with Ada Validation Office (AVO) policies and procedures.

The purpose of this report is to document the results of the testing performed on the translator and, in particular, to

- identify any language constructs supported by the translator that do not conform to the Ada standard

- identify any unsupported language constructs required by the Ada standard
- describe implementation-dependent behavior allowed by the standard

1.2 USE OF THE VALIDATION SUMMARY REPORT

The Ada Validation Office may make full and free public disclosure of this report in accordance with the "Freedom of Information Act" (5 U.S.C. #552). The results of the validation are only for the purpose of satisfying United States Government requirements and apply only to the computers, operating systems, and compiler version identified in this report.

The Ada Compiler Validation Capability is used to determine, insofar as is practical, the degree to which the subject compiler conforms to the Ada standard. Thus, this report is necessarily discretionary and judgmental. The United States Government does not represent or warrant that the statements, or any one of them, set forth in this report are accurate or complete, nor that the subject compiler has no other nonconformances to the Ada standard. This report is not meant to be used for the purpose of publicizing the findings summarized therein.

Questions regarding this report or the validation tests should be sent to the Ada Validation Office at:

Ada Validation Facility (ASD/ADOL)
Computer Operations Division
ASD Computer Center
Wright-Patterson AFB OH 45433

1.3 REFERENCES

Reference Manual for the Ada Programming Language, ANSI/MIL-STD-1815A, February 1983.

Ada Validation Organization: Policies and Procedures, Mitre Corporation, June 1982, PB 83-110601.

Ada Compiler Validation Implementers' Guide, SofTech, Inc., October 1980.

The Ada Compiler Validation Capability, Computer, Vol. 14, No. 6, June

1981.

Using the ACVC Tests, SofTech, Inc., February 1984.

1.4 DEFINITIONS OF TERMS

Class A tests are passed if no errors are detected at compile time. Although these tests are constructed to be executable, no checks can be performed at run time to see if the test objective has been met; this distinguishes Class A from Class C tests. For example, a Class A test might check that keywords of other languages (other than those already reserved in Ada) are not treated as reserved words by an Ada implementation.

Class B tests are illegal programs. They are passed if all the errors they contain are detected at compile time (or link time) and no legal statements are considered illegal by the compiler.

Class C tests consist of executable self-checking programs. They are passed if they complete execution and do not report failure.

Class D tests are capacity tests. Since there are no firm criteria for the number of identifiers permitted in a compilation, number of units in a library, etc., a compiler may refuse to compile a class D test. However, if such a test is successfully compiled, it should execute without reporting a failure.

Class E tests provide information about an implementation's interpretation of the Standard. Each test has its own pass/fail criterion.

Class L tests consist of illegal programs whose errors cannot be detected until link time. They are passed if errors are detected prior to beginning execution of the main program.

CUSTOMER: The agency requesting the validation (TeleSoft).

HOST: The computer on which the compiler executes (Callan Unistar 300).

ACVC: The Ada Compiler Validation Capability.

IG: ACVC Implementers' Guide.

AVO: The Ada Validation Office. In the context of this report, the AVO is responsible for setting policies and procedures for compiler validations.

AVF: The Ada Validation Facility, Wright-Patterson Air

Force Base. In the context of this report, the AVF is responsible for conducting compiler validations.

TARGET: The computer for which a compiler generates object code (Callan Unistar 300).

VALIDATION: The process of validating a compiler. The term is used interchangeably with test or compiler test.

VALIDATION TESTS: The generic form used to refer to a set of test programs which evaluate how closely a compiler conforms to its language specification. In this report, the term will be used (unqualified) to mean the ACVC tests.

CHAPTER 2

TEST ANALYSIS

A summary of tests processed, by class, is given below, where

Pr = processed.
NA = found to be inapplicable for this implementation.
Er = found to be incorrect and withdrawn from the valida tc
P = passed.
F = failed.
FE = failed to execute to completion.
FC = failed to compile successfully.
Fs = total of all failures (i.e., F+FE+FC).

The following table shows that TeleSoft's TeleSoft_Ada compiler passed all applicable correct tests.

Test Class	Pr	NA	Er	P	F	FE	FC	Fs
A	55	1	2	52	0	0	0	0
B	696	7	8	681	0	0	0	0
C	882	29	30	823	0	0	0	0
D	14	7	0	7	0	0	0	0
E	5	0	0	5	0	0	0	0
L	60	0	21	39	0	0	0	0
Total	1712	44	61	1607	0	0	0	0

44 tests in the suite were processed but were found to be not applicable to the TeleSoft_Ada translator (see section 4.2.7).

In addition, 61 tests were withdrawn from the test suite because they did not conform to ANSI/MIL-STD-1815A, the Ada Language Standard (see section 4.2.6 for details).

2.1 CLASS A TESTING

Class A tests check that legal Ada programs can be successfully compiled. These tests are executed but contain no executable self-checking capabilities. There were 55 class A test programs processed in this validation.

2.1.1 Class A Test Procedures

Each class A test is separately compiled and executed. However, the only purpose of execution is to produce a message indicating that the test passed.

2.1.2 Class A Test Results

Successful compilation and execution without any error messages indicates the tests passed. There were 2 class A tests that were withdrawn because of errors in the tests and 1 class A test was found to be inapplicable to this implementation. All 52 applicable class A tests passed.

2.2 CLASS B TESTING

Class B tests check the ability to recognize illegal language usage. 696 class B tests were processed.

2.2.1 Class B Test Procedures

Each class B test is separately compiled. The resulting test compilation listings are manually examined to see whether every illegal construct in the test is detected. If all errors are not detected, a version of the test is created that contains only undetected illegal constructs. This "split" version is recompiled and the results analyzed. If all errors are still not detected, the revision process is repeated until a revised test contains only a single illegal construct.

A class B test is considered to fail only if a version of the test containing a single illegal construct is accepted by the compiler (i.e., an illegal construct is not detected) or a version containing no errors is rejected (i.e., a legal construct is rejected).

2.2.2 Class B Test Results

696 class B tests were presented to the compiler. 7 of these tests were found to be inapplicable to this implementation (see section 4.2.7); 8 tests were found to be incorrect (i.e., a conforming compiler would have failed each of these tests - see section 4.2.6). All 681 remaining class B tests passed. There were 3884 illegal constructs in the tests; all were correctly detected by the compiler, and no legal construct was rejected.

No B tests were split. All errors in the tests were detected by the Telesoft_Ada compiler when compiling the original tests.
All illegal constructs were detected except in some tests that were withdrawn because of errors in the tests (see Section 4.2.8).

Test B26005A.ADA contains all the ASCII control characters. All ASCII control characters survived the tape to disk transfer without any modifications.

2.3 CLASS C TESTING

Class C tests check that legal Ada programs are correctly compiled and executed by an implementation. 882 class C tests were processed in this validation.

2.3.1 Class C Test Procedures

Each Class C test is separately compiled and executed. The tests are self-checking and produce PASS/FAIL messages. Any "failed" tests are individually checked to see if they are correct and if they are applicable to the implementation. Any tests that are inapplicable or that do not conform to the Ada Standard are withdrawn.

2.3.2 Class C Test Results

All class C tests were processed except those tests requiring a floating point precision exceeding SYSTEM.MAX_DIGITS (277 tests).

882 class C tests were processed. 30 tests were withdrawn because of errors in the tests; in addition, 29 tests were found to be inapplicable to this implementation. The remaining 823 tests passed.

2.4 CLASS D TESTING

Class D tests are executable tests used to check an implementation's compilation and execution capacities. 14 class D tests were used in this validation.

2.4.1 Class D Test Procedures

Each Class D test is separately compiled and executed. The tests are self-checking and produce PASS/FAIL messages.

2.4.2 Class D Test Results

Of the 14 class D tests, 7 passed and 7 were found to be inapplicable to this implementation. None were withdrawn because of errors in the tests. See section 4.2.8 for further information.

2.5 CLASS E TESTING

Class E tests are executable tests that provide information about an implementation's interpretation of the Standard in areas where the Standard permits implementations to differ. Each test has its own pass/fail criterion. 5 class E tests were used in this validation.

2.5.1 Class E Test Procedures

Each Class E test is separately compiled and executed. The tests are self-checking and produce commentary and PASS/FAIL messages.

2.5.2 Class E Test Results

All 5 class E tests passed. See section 4.2.8 for further information.

2.6 CLASS L TESTING

Class L tests check that incomplete or illegal Ada programs involving multiple separately compiled source files are detected at link time and are not allowed to execute. 60 test programs were processed in this validation attempt.

2.6.1 Class L Test Procedures

Each Class L test is separately compiled and execution is attempted. The tests produce FAIL messages if executed. Any "failed" tests are individually checked to see if they are correct and if they are applicable to the implementation. Any tests that are inapplicable or that do not conform to the Ada standard are withdrawn.

2.6.2 Class L Test Results

Of the 60 class L tests, none were found to be inapplicable to this implementation (see section 4.2.7), and 21 were withdrawn due to errors in the tests (see section 4.2.6). The remaining 39 tests passed.

CHAPTER 3

COMPILER NONCONFORMANCES

There were no nonconformances to the Ada standard detected in this validation. The compiler passed all applicable correct tests.

CHAPTER 4

ADDITIONAL INFORMATION

This section describes in more detail how the validation was conducted.

4.1 COMPILER PARAMETERS

Certain tests do not apply to all Ada compilers, e.g., compilers are not required to support several predefined floating point types, so tests must be selected based on the predefined types an implementation actually supports. In addition, some tests are parameterized according to the maximum length allowed by an implementation for an identifier (or other lexical element; this is also the maximum line length), the maximum floating point precision supported, etc. The implementation dependent parameters used in performing this validation were:

- maximum lexical element length: 200
- maximum digits value for floating point types: 6
- SYSTEM.MIN_INT: -32,768 (-(2**15))
- SYSTEM.MAX_INT: 32,767 (2**15 - 1)
- predefined numeric types: FLOAT, INTEGER
- INTEGER'FIRST: -32768
- INTEGER'LAST: 32767
- source character set: ASCII
- extended ASCII characters:
  "abcdefghijklmnopqrstuvwxyz!$%?@[\]^`{}~"

- non-ascii char type: (NON_NULL)
- TEXT_IO.COUNT'LAST: 32766
- TEXT_IO.FIELD'LAST: 1000
- illegal external file name1: !#$¦\{/}''()+#\;
- illegal external file name2: (1..120 => 'A')
- SYSTEM.PRIORITY'FIRST: 1
- SYSTEM.PRIORITY'LAST: 1

4.2 TESTING INFORMATION

Tests were compiled/executed at TeleSoft, 10639 Roselle St., San Diego CA. Three Callan Unistar 300 processors simultaneously executed the tests using a control program prepared by TeleSoft and reviewed by the validation team.

4.2.1 Pre-Test Procedures

Prior to testing, appropriate values for the compiler-dependent parameters were determined. These values were used to adapt tests that depend on the values. A magnetic tape containing the adapted tests was prepared and brought to the testing site.

4.2.2 Control Files

TeleSoft provided command procedures that compiled and executed tests automatically.

4.2.3 Test Procedures

The validation was run on three identical Callan Unistar 300 computers. Each Callan Unistar 300 was connected to two 5 1/4 inch Winchester disks with 2 MegaBytes of storage.

The Ada Compiler Validation Capability version 1.3 tests supplied by the AVO were transferred from an ANSI standard formatted tape to disk on a DEC VAX 11/780. The ACVC test files were written to a second tape

using a utility program in Callan Unistar 300 UNIX "tar" (tape archive) format. The tape archive (tar) formatted tape was read directly onto the disk area of each Callan Unistar computer. Complete copies of the ACVC were maintained in the disk area of each Callan Unistar 300 to allow flexibility in scheduling test execution.

The package REPORT and the procedure CHECK_FILE were compiled and the corresponding library file saved. The tests checking the REPORT package and CHECK_FILE procedure were executed on all three Callan Unistar 300 computers. The test files were then executed with an even distribution over all three machines. The results for each test file were checked manually. The results were also saved on disk and transferred back to an ANSI standard formatted tape.

4.2.4 Test Analysis Procedures

On completion of testing, all results were analyzed for failed class A, C, D, E, or L programs, and all class B compilation results were individually analyzed. Analysis procedures are described for each test class in chapter 2.

Tests found to contain errors were withdrawn.

4.2.5 Performance Information

The real time required for running all of the ACVC tests was approximately 57 hours, using three Callan Unistar 300 computers. Timing information was collected for commands, compilation, or execution, on a subset of the test files. Timing information is presented in Appendix A.

4.2.6 Description Of Errors In Withdrawn Tests

The following tests in version 1.3 of the ACVC did not conform to the ANSI Ada standard and were withdrawn for the reasons given below:

- 'VALUE is only defined for discrete types: C34001F-B.
- A statement sequence is required in a subprogram body: B34008A-B.
- When the catenation operator has a null left operand, the lower bound of the result is determined by the lower bound of the right operand: C36174A.

- A test assumed that when a constrained array type was declared using a range, e.g., 1..10, that the index subtype was INTEGER instead of INTEGER range 1..10: C52102B-AB.

- A test assumed that loop identifiers need only be unique within blocks rather than within bodies: B55A01A-AB.

- An expression of a universal integer type cannot contain an operator in the discrete range of a loop parameter specification if both bounds are of type universal integer: B55B09C-AB, B55B09D-AB.

- Instantiation of a generic subprogram before its body is elaborated raises PROGRAM_ERROR: C58004D-AB.

- Parameter mode {out} is illegal for a limited type outside its defining package: C61010A-AB.

- A private type must have a full declaration: B74205A-B.

- Aggregates are available for an array of private type: B74205A-B.

- A test assumed that INTEGER'SIZE would always be equal to BOOLEAN'SIZE: C74206A-B.

- Identifiers for the floating-point machine-dependent attributes should begin with "MACHINE_": B74207A-B.

- The identifer at the end of a loop or block must be a loop_ or block_identifier, and not a label_identifier: A83A06A-B.

- A label, block, or loop name must be distinct throughout a program unit (excluding inner units): B83A06B-B.

- Because no pragma ELABORATE was provided, a library subprogram could be invoked before its body was elaborated: C86001E-B, LA3004A4-AB, LA3004B4-B, LA5001A3-B, LA5001A4-B, LA5001A5-B, CA5002A-B, CA5002B4-B, CA5002B5-B.ADA.

- An overloaded function call was ambiguous: C87B04A-B.

- The name of an access type cannot be used in its own declaration, even when the access type is an incomplete type: C87B28A-B, C87B39A-B.

- An array aggregate with named associations and an {others} choice must be qualified in an assignment context: C87B31A-B.

- A universal integer expression as the argument of T'VAL is not implicitly converted to type T: C87B32A-B.
- The type of an operand can resolve which overloaded operator is used: C87B32A-B.
- An aborted task does not immediately become terminated, as the test assumes; instead, it becomes not 'CALLABLE: C9A005A-B, C9A007A-B.
- A function was compiled with a context clause that referenced a package. After the package was recompiled, an attempt was made to recompile the function body without first recompiling a function specification referencing the recompiled package: CA3006C4-B.
- A test assumed that record types with discriminants with defaults could match actual parameters for constrained generic formal type parameters: AE2101A-B, CE2401C-B.

4.2.7 Description Of Inapplicable Tests

277 tests were not processed because SYSTEM.MAX_DIGITS was 6. These tests were:

C24113C,D,...,Y-B	C35708C,D,...,Y-B	C45421C,D,...,Y-B
C35705C,D,...,Y-B	C35802C,D,...,Y-B	C45424C,D,...,Y-B
C35706C,D,...,Y-B	C45241C,D,...,Y-B	C45521C,D,...,Y-B
C35707C,D,...,Y-B	C45321C,D,...,Y-B	C45621C,D,...,Z-B

14 tests were inapplicable because the implementation did not support SHORT_INTEGER, LONG_INTEGER, SHORT_FLOAT, LONG_FLOAT, or LONG_LONG_INTEGER:

SHORT_INTEGER	C34001D-B, B52004E, C55B07B-AB, B86001CR-AB
LONG_INTEGER	C34001E-B, B52004D, C55B07A-AB, B86001CS-AB
SHORT_FLOAT	C35702A-AB, B86001CP-AB
LONG_FLOAT	C34001G-B, C35702B-AB, B86001CQ-AB
LONG_LONG_INTEGER	B86001DT-AB

Three class D tests, D4A002B, D4A004A-AB, and D4A004B, required the evaluation of 32 and 64 bit universal integer expressions, which exceeded the capacity of the implementation; these tests were therefore considered inapplicable.

C55B16A-AB was inapplicable because it required support for explicitly specifying the representation of an enumeration type.

C86001E-B was inapplicable because it redeclares library unit SYSTEM and the implementation uses the predefined SYSTEM package in its TEXT_IO package.

C87B62A-B, C87B62B-B, and C87B62C-B were inapplicable because they required support for length clauses for 'SIZE, 'STORAGE_SIZE, and 'SMALL, respectively.

CA1012A*-B was inapplicable because generic declarations and bodies must be given together in a single compilation for this implementation. Actually, the implementation partially supports separate compilation of generic declarations and bodies because CA1012A*-B successfully compiled, executed, and passed.

LA3004A*-AB and LA3004B*-B were inapplicable because they required support for the INLINE pragma.

CC3407B-AB and CC3407C-AB were inapplicable because they declared arrays for which 'LENGTH was greater than SYSTEM.MAX_INT, for which the implementation raised an unhandled NUMERIC_ERROR exception.

AE2101C-B, CE2201D-B, CE2201E-B, and CE2401D-B were inapplicable because the implementation's version of SEQUENTIAL_IO, DIRECT_IO, and TEXT_IO did not allow for instantiation with unconstrained array and record types.

CE2102D-B, CE2102E-B, CE2102F-B, and CE2102G-B were inapplicable because the implementation does support modes IN_FILE, OUT_FILE, and INOUT_FILE, and also the procedures RESET and DELETE.

CZ1201A-AB, CZ1201B-AB, CZ1201C-AB, and CZ1201D-AB were inapplicable because the body of package VAR_STRINGS (which they use) was too large for its object code to be completely covered by base registers.

Results for inapplicable class D and E tests are given in section 4.2.8.

4.2.8 Information Derived From The Tests

Processing of the following tests indicated support as described below for a variety of implementation options examined by the tests.

- E24101A-B.TST: if a based integer literal has a value exceeding SYSTEM.MAX_INT, an implementation may either reject the compilation unit at compile time or raise NUMERIC_ERROR at

run time. Raising NUMERIC_ERROR at run time is preferred, since it makes programs compilable for a wider variety of implementations (and the numeric literal might occur in an unexecutable portion of code). This test showed that TeleSoft_Ada raises NUMERIC_ERROR at run time for a compilation unit containing an integer literal exceeding SYSTEM.MAX_INT.

- B26005A.ADA: This test contains all the ASCII control characters in string literals. The system did not modify any ASCII control characters when this test was executed.

- D29002K-B.ADA: This test declares 713 identifiers and was passed by TeleSoft_Ada.

- E36202A-B.ADA and E36202B-B.ADA: These tests declare multi-dimensional null BOOLEAN arrays in which 'LENGTH of one dimension exceeds INTEGER'LAST and SYSTEM.MAX_INT, respectively. An implementation can accept this, or it can raise NUMERIC_ERROR or STORAGE_ERROR at run time. TeleSoft_Ada raised NUMERIC_ERROR.

- D4A002A-AB.ADA, D4A002B.ADA, D4A004A-AB.ADA, and D4A004B.ADA: These tests contain universal integer calculations requiring 32 and 64 bits of accuracy, i.e., values that exceed SYSTEM.MAX_INT are used. An implementation is allowed to reject programs requiring such calculations. TeleSoft_Ada passed D4A002A-AB and rejected the others at run time.

- C52103X-B.ADA, E52103Y-B.ADA, C52104X-B.ADA, C52104Y-B.ADA: These tests declare BOOLEAN arrays with INTEGER'LAST+3 components. An implementation may raise NUMERIC_ERROR at the type declaration or STORAGE_ERROR when array objects of these types are declared, or it may accept the type and object declarations. TeleSoft_Ada raised NUMERIC_ERROR when the type was declared in C52103X-B, C52104X-B, and C52104Y-B, but it accepted a null array with one dimension of length greater than INTEGER'LAST in E52103Y-B.

- A series of tests (D55A03*-AB.ADA) check to see what level of loop nesting is allowed by an implementation. Tests containing 17 or fewer nested loops passed, and tests containing 31 or more nesting levels could not be processed without exceeding the implementation's capacity.

- D56001B-AB.ADA contains blocks nested 65 levels deep. This test was passed.

- C94004A-B.ADA: This test checks to see what happens when a library unit initiates a task and a main program terminates without ensuring that the library unit's task is terminated. An implementation is allowed to terminate the library unit

task, or it is allowed to leave the task in execution. This test showed that such library tasks do terminate when the main program terminates.

- CA1012A4M-B.DEP: This test checks whether an implementation requires generic library unit bodies to be compiled in the same compilation as the generic declaration. In general, TeleSoft_Ada does not allow generic declarations and bodies to be compiled in completely separate compilations, although this test successfully compiled, executed, and passed.

- BC3204C*-B.ADA and BC3205D*-B.ADA: These tests contain a separately compiled generic declaration, some instantiations, and a body. An implementation must reject either the instantiations or the body. TeleSoft_Ada rejected the body because it was not in the same compilation as its declaration.

- CE2106A-B.DEP and CE3110A-B.DEP: These tests confirmed that dynamic creation and deletion of files is supported.

- EE3102C-B.ADA: This test confirmed that an Ada program can open an existing file in OUT_FILE mode, and can create an existing file in either OUT_FILE or IN_FILE mode.

- CE2107*-B.DEP showed that more than one internal file may be associated with the same external file. All options tested were supported by the TeleSoft_Ada compiler.

- CE3111*-B.DEP confirmed that more than one internal file may be associated with the same external file. TeleSoft_Ada passed the tests when both files were opened for reading, when one file was opened for reading and a second for writing, and when both files were opened for writing.

CHAPTER 5

SUMMARY AND CONCLUSIONS

The Ada Validation Office identified 1712 tests of the ACVC version 1.3 as being potentially applicable to the validation of the TeleSoft compiler hosted on the Callan Unistar 300. Of these, 61 were withdrawn due to test errors, and 44 were determined to be inapplicable after they were processed. The compiler passed the remaining 1607 tests.

The AVF considers these results to show acceptable compliance to the January 1983 ANSI Ada Reference Manual.

APPENDIX A

COMPLETE LIST OF TESTS AND RESULTS

This Appendix gives a complete list of the ACVC test files used in the validation attempt, in order by ACVC Implementers' Guide (Ada Reference Manual) section and objective.

To obtain more information about a test itself, the test name indicates the class of the test and which test objective in the ACVC Implementers' Guide applies to the test. The name is interpreted as follows, where the first column below indicates the character position in the name and the second column, the meaning of that position:

1	Class of test (A, B, C, D, E, L).
2	Implementers' Guide Chapter number (in hexadecimal).
3	Implementers' Guide Section number within a Chapter (in hexadecimal).
4	Implementers' Guide Subsection number or letter.
5, 6	Implementers' Guide Test Objective number (two digit decimal number).
7	Test sequence letter (A-Z).
8	Compilation sequence digit or letter (0-9,A-Z).
9	When there are several compilation units, "M" indicates the main program.

Characters 8 and 9 are only present for tests that consist of several separately compiled units. The eighth character indicates the order in which the units are to be compiled (unit 0 is compiled first). The ninth character is only present for the main program and is always "M".

The suffix "-AB" means the test is valid for both the ANSI Ada Standard and the version of Ada published in July 1980. The suffix "-B" implies the test is only valid for the ANSI Standard. Tests without a suffix are considered to be applicable to both the ANSI Standard and the July 1980 version.

A file name ending with .TST means the test depends on one or more of the implementation-dependent parameters listed in section 4.1. A file name ending with .DEP means the test is not necessarily applicable to all implementations.

The result for each file is also given, where:

P = passed.
PC = compilation was successful (for unit of multiple unit test).
PS = passed after modifying (splitting) the test (e.g., to see if all errors can be detected by the compiler).
F = failed.
FE = failed to execute to completion.
FC = failed to compile correctly.
NA = not applicable to this implementation.
W = withdrawn due to test errors.

In addition, the following data were collected and are given for each test file.

SC = n the number of semicolons in the source file.

CT = n the compilation time (in seconds).

ET = n the execution (CPU) time (in seconds).

EC = n the number of intentional errors (marked by comments) in a class B file.

The results for each test file were as follows:

A21001A.ADA	P	SC = 29	
B22001A-AB.TST	P	SC = 14	EC = 1
B22001B-AB.TST	P	SC = 14	EC = 1
B22001C-AB.TST	P	SC = 14	EC = 1
B22001D-AB.TST	P	SC = 15	EC = 1
B22001E-AB.TST	P	SC = 12	EC = 1
B22001F-AB.TST	P	SC = 12	EC = 1
B22001G-AB.TST	P	SC = 12	EC = 1
B22001H-AB.TST	P	SC = 12	EC = 1
B22001I-AB.TST	P	SC = 4	EC = 1
B22001J-AB.TST	P	SC = 4	EC = 1
B22001K-AB.TST	P	SC = 4	EC = 1
B22001L-AB.TST	P	SC = 5	EC = 1
B22001M-AB.TST	P	SC = 5	EC = 1
B22001N-AB.TST	P	SC = 5	EC = 1
A22002A.ADA	P	SC = 26	
B22003A.ADA	P	SC = 11	EC = 5
B22004A.ADA	P	SC = 7	EC = 5
B22004B.ADA	P	SC = 6	EC = 4
B22004C.ADA	P	SC = 7	EC = 4
C23001A.ADA	P	SC = 16	
B23002A.ADA	P	SC = 13	EC = 6
C23003A.TST	P	SC = 17	
B23003D-AB.TST	P	SC = 4	EC = 1
B23003E-AB.TST	P	SC = 3	EC = 1

B23003F-AB.TST	P	SC = 3	EC = 1
B23004A.ADA	P	SC = 19	EC = 8
B23004B.ADA	P	SC = 27	EC = 12
B24001A.ADA	P	SC = 30	EC = 14
B24001B.ADA	P	SC = 36	EC = 17
B24001C.ADA	P	SC = 37	EC = 17
C24002A.ADA	P	SC = 10	
C24002B.ADA	P	SC = 10	
C24002C.ADA	P	SC = 11	
C24003A.TST	P	SC = 15	
C24003B.TST	P	SC = 20	
C24003C.TST	P	SC = 21	
B24005A.ADA	P	SC = 14	EC = 6
B24005B.ADA	P	SC = 15	EC = 6
E24101A-B.TST	P	SC = 15	
C24102A.ADA	P	SC = 13	
C24102B.ADA	P	SC = 14	
C24102C.ADA	P	SC = 17	
C24103A.ADA	P	SC = 38	
B24104A.ADA	P	SC = 20	EC = 18
B24104B.ADA	P	SC = 8	EC = 6
B24104C.ADA	P	SC = 9	EC = 6
C24113A-B.DEP	P	SC = 18	
C24113B-B.DEP	P	SC = 18	
B26002A.ADA	P	SC = 11	EC = 4
C26002B.ADA	P	SC = 19	
A26004A.TST	P	SC = 11	
B26005A.ADA	P	SC = 37	EC = 31
C26006A-AB.ADA	P	SC = 12	
C26008A-AB.ADA	P	SC = 9	
C27001A-AB.ADA	P	SC = 10	
C27002A-B.ADA	P	SC = 13	
B29001A-B.ADA	P	SC = 108	EC = 63
A29002A-B.ADA	P	SC = 65	
A29002B-B.ADA	P	SC = 67	
A29002C-B.ADA	P	SC = 66	
A29002D-B.ADA	P	SC = 83	
A29002E-B.ADA	P	SC = 67	
A29002F-B.ADA	P	SC = 108	
A29002G-B.ADA	P	SC = 84	
A29002H-B.ADA	P	SC = 57	
A29002I-B.ADA	P	SC = 93	
A29002J-B.ADA	P	SC = 73	
D29002K-B.ADA	P	SC = 718	
B32103A-AB.ADA	P	SC = 26	EC = 12
B32106A-B.ADA	P	SC = 10	EC = 4
B32201A-B.ADA	P	SC = 64	EC = 27
B32202A-B.ADA	P	SC = 33	EC = 15
B32202B-B.ADA	P	SC = 21	EC = 9
B32202C-B.ADA	P	SC = 28	EC = 12
C32203A-B.ADA	P	SC = 15	

A32203B-B.ADA	P	SC = 22	
A32203C-B.ADA	P	SC = 18	
A32203D-B.ADA	P	SC = 16	
B33001A.ADA	P	SC = 27	EC = 10
B33002A.ADA	P	SC = 8	EC = 5
B33003A.ADA	P	SC = 14	EC = 4
B33003B-AB.ADA	P	SC = 22	EC = 9
B33003C-AB.ADA	P	SC = 22	EC = 9
B33004A.ADA	P	SC = 33	EC = 19
C34001A-B.ADA	P	SC = 65	
C34001B-B.ADA	P	SC = 37	
C34001C-B.ADA	P	SC = 34	
C34001D-B.DEP	NA	SC = 21	
C34001E-B.DEP	NA	SC = 21	
C34001F-B.DEP	W		
C34001G-B.DEP	NA	SC = 38	
C34001H-B.ADA	P	SC = 20	
C34001I-B.ADA	P	SC = 26	
C34001K-B.ADA	P	SC = 51	
C34001L-B.ADA	P	SC = 44	
C34001M-B.ADA	P	SC = 25	
C34001N-B.ADA	P	SC = 25	
C34001O-B.ADA	P	SC = 80	
C34001P-B.ADA	P	SC = 22	
C34001Q-B.ADA	P	SC = 25	
C34001R-B.ADA	P	SC = 19	
B34001S-AB.ADA	P	SC = 13	EC = 3
C34001T-B.ADA	P	SC = 20	
C34002A-B.ADA	P	SC = 58	
C34002B-B.ADA	P	SC = 28	
B34008A-B.ADA	W		
A34008B-B.ADA	P	SC = 34	
B35101A.ADA	P	SC = 6	EC = 3
C35104A.ADA	P	SC = 9	
B35301A.ADA	P	SC = 12	EC = 6
B35501A.ADA	P	SC = 34	EC = 18
C35504A-AB.ADA	P	SC = 13	
C35504B-B.ADA	P	SC = 22	
C35505A.ADA	P	SC = 28	
C35505B.ADA	P	SC = 27	
B35506A.ADA	P	SC = 36	EC = 9
B35506B.ADA	P	SC = 23	EC = 9
C35508A-AB.ADA	P	SC = 21	
C35508B-B.ADA	P	SC = 57	
B35701A.TST	P	SC = 10	EC = 6
C35702A-AB.DEP	NA	SC = 7	
C35702B-AB.DEP	NA	SC = 7	
C35703A.ADA	P	SC = 11	
C35704A-AB.ADA	P	SC = 12	
C35704B-AB.ADA	P	SC = 12	
C35704C-AB.ADA	P	SC = 12	

C35704D-AB.ADA	P	SC = 16	
C35705A-B.DEP	P	SC = 16	
C35705B-B.DEP	P	SC = 16	
C35706A-B.DEP	P	SC = 15	
C35706B-B.DEP	P	SC = 15	
C35707A-B.DEP	P	SC = 11	
C35707B-B.DEP	P	SC = 11	
C35708A-B.DEP	P	SC = 11	
C35708B-B.DEP	P	SC = 11	
B35709A.ADA	P	SC = 14	EC = 3
C35711A-B.ADA	P	SC = 31	
C35802A-B.DEP	P	SC = 22	
C35802B-B.DEP	P	SC = 22	
C35904A-B.ADA	P	SC = 31	
B35A03A-B.ADA	P	SC = 6	EC = 2
B36101A-AB.ADA	P	SC = 119	EC = 68
B36102A.ADA	P	SC = 35	EC = 17
B36103A.ADA	P	SC = 17	EC = 7
B36105A-B.ADA	P	SC = 12	EC = 6
B36171A-B.ADA	P	SC = 68	EC = 33
B36171B-B.ADA	P	SC = 16	EC = 4
B36171C-AB.ADA	P	SC = 4	EC = 1
B36171D-AB.ADA	P	SC = 3	EC = 1
B36171E-AB.ADA	P	SC = 3	EC = 1
B36171F-AB.ADA	P	SC = 3	EC = 1
B36171G-AB.ADA	P	SC = 5	EC = 1
B36171H-AB.ADA	P	SC = 4	EC = 1
B36171I-AB.ADA	P	SC = 4	EC = 1
C36172A-B.ADA	P	SC = 86	
C36174A-B.ADA	W		
B36201A-B.ADA	P	SC = 60	EC = 32
E36202A-B.ADA	P	SC = 20	
E36202B-B.ADA	P	SC = 23	
C36204A-B.ADA	P	SC = 51	
C36205A.ADA	P	SC = 70	
C36205B.ADA	P	SC = 62	
C36205C.ADA	P	SC = 58	
C36205D.ADA	P	SC = 72	
C36205E.ADA	P	SC = 57	
C36205F.ADA	P	SC = 58	
C36205G.ADA	P	SC = 58	
C36205H.ADA	P	SC = 59	
C36205I.ADA	P	SC = 59	
C36205J.ADA	P	SC = 67	
C36205K.ADA	P	SC = 62	
C36301A-B.ADA	P	SC = 16	
C36301B-AB.ADA	P	SC = 12	
C36302A.ADA	P	SC = 9	
C36303A.ADA	P	SC = 15	
C36304A-B.ADA	P	SC = 38	
C36305A-AB.ADA	P	SC = 40	

B37003A-AB.ADA	P	SC = 33	EC = 14
B37004A-B.ADA	P	SC = 44	EC = 27
B37004C-B.ADA	P	SC = 12	EC = 4
B37004D-B.ADA	P	SC = 4	EC = 1
B37004E-B.ADA	P	SC = 8	EC = 1
B37004F-B.ADA	P	SC = 9	EC = 1
B37004G-B.ADA	P	SC = 5	EC = 1
B37004H-B.ADA	P	SC = 12	EC = 5
C37005A.ADA	P	SC = 30	
C37007A-AB.ADA	P	SC = 60	
C37008A-B.ADA	P	SC = 126	
C37008B-B.ADA	P	SC = 99	
C37011A-B.ADA	P	SC = 26	
C37012A-AB.ADA	P	SC = 19	
C37013A-AB.ADA	P	SC = 18	
B37101A.ADA	P	SC = 44	EC = 9
C37103A-AB.ADA	P	SC = 41	
C37105A.ADA	P	SC = 18	
B37201A.ADA	P	SC = 28	EC = 13
B37202A.ADA	P	SC = 44	EC = 19
B37202B.ADA	P	SC = 7	EC = 1
B37203A.ADA	P	SC = 14	EC = 6
B37204A-AB.ADA	P	SC = 54	EC = 11
B37205A-AB.ADA	P	SC = 8	EC = 3
C37208A-B.ADA	P	SC = 62	
C37208B-AB.ADA	P	SC = 36	
C37209A.ADA	P	SC = 73	
B37301A.ADA	P	SC = 25	EC = 8
B37301B.ADA	P	SC = 33	EC = 6
B37302A-AB.ADA	P	SC = 36	EC = 11
B37303A.ADA	P	SC = 25	EC = 5
C37304A-AB.ADA	P	SC = 22	
C37305A.ADA	P	SC = 24	
C37306A.ADA	P	SC = 21	
C37307A-AB.ADA	P	SC = 30	
B37307B-AB.ADA	P	SC = 21	EC = 3
C37309A-AB.ADA	P	SC = 22	
B37309B-AB.ADA	P	SC = 17	EC = 2
C37310A-AB.ADA	P	SC = 48	
B37310B-B.ADA	P	SC = 30	EC = 5
B37311A-AB.ADA	P	SC = 10	EC = 2
B38001A.ADA	P	SC = 12	EC = 4
B38003A-AB.ADA	P	SC = 23	EC = 13
C38004A.ADA	P	SC = 19	
C38005A-B.ADA	P	SC = 66	
C38006A-B.ADA	P	SC = 12	
C38007A-B.ADA	P	SC = 13	
B38008A-B.ADA	P	SC = 18	EC = 8
B38008B-AB.ADA	P	SC = 24	EC = 12
B38101A-B.ADA	P	SC = 47	EC = 12
B38101B-AB.ADA	P	SC = 12	EC = 1

C38102A-AB.ADA	P	SC = 89	
C38102B-B.ADA	P	SC = 16	
C38102C-B.ADA	P	SC = 16	
B38103A-B.ADA	P	SC = 70	EC = 11
C38104A-B.ADA	P	SC = 33	
B38105A-AB.ADA	P	SC = 32	EC = 11
B38105B-AB.ADA	P	SC = 28	EC = 6
B38106A-B.ADA	P	SC = 45	EC = 7
B38106B-B.ADA	P	SC = 45	EC = 7
B41101A-B.ADA	P	SC = 19	EC = 5
B41101C-AB.ADA	P	SC = 23	EC = 6
C41101D-B.ADA	P	SC = 33	
B41102A-AB.ADA	P	SC = 9	EC = 1
B41102B-B.ADA	P	SC = 9	EC = 1
B41102C-B.ADA	P	SC = 9	EC = 1
C41103A-B.ADA	P	SC = 117	
C41103B-B.ADA	P	SC = 117	
C41105A-B.ADA	P	SC = 28	
C41106A-B.ADA	P	SC = 22	
C41107A-AB.ADA	P	SC = 71	
B41201A-B.ADA	P	SC = 58	EC = 21
B41201C.ADA	P	SC = 22	EC = 5
C41201D-B.ADA	P	SC = 36	
B41202A-B.ADA	P	SC = 12	EC = 3
B41202B-AB.ADA	P	SC = 8	EC = 1
B41202C-B.ADA	P	SC = 8	EC = 1
B41202D-B.ADA	P	SC = 8	EC = 1
C41203A-B.ADA	P	SC = 120	
C41203B-B.ADA	P	SC = 119	
C41204A.ADA	P	SC = 29	
C41205A-B.ADA	P	SC = 30	
C41206A.ADA	P	SC = 26	
C41301A-B.ADA	P	SC = 104	
B41302A-AB.ADA	P	SC = 6	EC = 1
B41302B-AB.ADA	P	SC = 7	EC = 1
C41303A-B.ADA	P	SC = 18	
C41303B-B.ADA	P	SC = 17	
C41303C-B.ADA	P	SC = 17	
C41303E-B.ADA	P	SC = 20	
C41303F-B.ADA	P	SC = 19	
C41303G-B.ADA	P	SC = 19	
C41303I-B.ADA	P	SC = 20	
C41303J-B.ADA	P	SC = 19	
C41303K-B.ADA	P	SC = 19	
C41303M-B.ADA	P	SC = 32	
C41303N-B.ADA	P	SC = 31	
C41303O-B.ADA	P	SC = 31	
C41303Q-B.ADA	P	SC = 34	
C41303R-B.ADA	P	SC = 33	
C41303S-B.ADA	P	SC = 33	
C41303U-B.ADA	P	SC = 34	

C41303V-B.ADA	P	SC = 33	
C41303W-B.ADA	P	SC = 33	
C41304A-B.ADA	P	SC = 50	
C41306A-B.ADA	P	SC = 18	
C41306B-B.ADA	P	SC = 32	
C41306C-B.ADA	P	SC = 32	
B44001A-B.ADA	P	SC = 67	EC = 27
B44002A-B.ADA	P	SC = 59	EC = 13
B44002B-B.ADA	P	SC = 23	EC = 5
B44002C.ADA	P	SC = 4	EC = 1
C45101A.ADA	P	SC = 56	
C45101B.ADA	P	SC = 35	
C45101C.ADA	P	SC = 26	
C45101E.ADA	P	SC = 35	
C45101G-AB.ADA	P	SC = 55	
C45101H-AB.ADA	P	SC = 34	
C45101I.ADA	P	SC = 23	
B45102A-AB.ADA	P	SC = 26	EC = 9
C45103A-AB.ADA	P	SC = 71	
C45103B-AB.ADA	P	SC = 31	
C45103C-AB.ADA	P	SC = 36	
C45104A.ADA	P	SC = 11	
C45105A-AB.ADA	P	SC = 18	
C45105B-B.ADA	P	SC = 28	
C45106A.ADA	P	SC = 31	
C45201A.ADA	P	SC = 108	
C45201B.ADA	P	SC = 102	
C45202A-AB.ADA	P	SC = 14	
B45203A.ADA	P	SC = 17	EC = 6
B45203B-AB.ADA	P	SC = 17	EC = 6
B45205A-AB.ADA	P	SC = 29	EC = 12
B45206A-AB.ADA	P	SC = 63	EC = 22
B45206B-B.ADA	P	SC = 10	EC = 2
B45207A-AB.ADA	P	SC = 14	EC = 2
B45207B-B.ADA	P	SC = 37	EC = 6
B45207C-B.ADA	P	SC = 41	EC = 6
B45207D-B.ADA	P	SC = 49	EC = 6
B45207G-B.ADA	P	SC = 15	EC = 3
B45207H-B.ADA	P	SC = 31	EC = 6
B45207I-B.ADA	P	SC = 35	EC = 6
B45207J-B.ADA	P	SC = 41	EC = 6
B45207M-AB.ADA	P	SC = 12	EC = 2
B45207N-AB.ADA	P	SC = 26	EC = 4
B45207O-AB.ADA	P	SC = 29	EC = 4
B45207P-B.ADA	P	SC = 31	EC = 4
B45207S-AB.ADA	P	SC = 13	EC = 2
B45207T-AB.ADA	P	SC = 28	EC = 4
B45207U-AB.ADA	P	SC = 31	EC = 4
B45207V-B.ADA	P	SC = 33	EC = 4
B45208A-AB.ADA	P	SC = 14	EC = 2
B45208B-B.ADA	P	SC = 21	EC = 3

B45208C-B.ADA	P	SC = 19	EC = 4
B45208G-AB.ADA	P	SC = 12	EC = 2
B45208H-B.ADA	P	SC = 16	EC = 3
B45208I-B.ADA	P	SC = 21	EC = 4
B45208M-AB.ADA	P	SC = 12	EC = 2
B45208N-AB.ADA	P	SC = 13	EC = 2
B45208S-AB.ADA	P	SC = 13	EC = 2
B45208T-AB.ADA	P	SC = 27	EC = 4
C45210A.ADA	P	SC = 85	
C45220A.ADA	P	SC = 102	
C45220B.ADA	P	SC = 192	
C45220C.ADA	P	SC = 107	
C45220D.ADA	P	SC = 197	
C45220E-B.ADA	P	SC = 13	
C45241A-B.DEP	P	SC = 50	
C45241B-B.DEP	P	SC = 50	
B45261A-AB.ADA	P	SC = 23	EC = 6
B45261B-AB.ADA	P	SC = 26	EC = 6
B45261C-AB.ADA	P	SC = 9	EC = 2
B45261D-AB.ADA	P	SC = 8	EC = 2
C45274A-AB.ADA	P	SC = 62	
C45274B-AB.ADA	P	SC = 65	
C45274C-AB.ADA	P	SC = 51	
C45321A-B.DEP	P	SC = 117	
C45321B-B.DEP	P	SC = 117	
C45345A-AB.ADA	P	SC = 29	
C45345B-AB.ADA	P	SC = 22	
C45401A.ADA	P	SC = 42	
C45401B-AB.ADA	P	SC = 54	
B45402A.ADA	P	SC = 29	EC = 12
C45421A-B.DEP	P	SC = 22	
C45421B-B.DEP	P	SC = 22	
C45424A-B.DEP	P	SC = 31	
C45424B-B.DEP	P	SC = 31	
C45521A-B.DEP	P	SC = 188	
C45521B-B.DEP	P	SC = 188	
B45522A.ADA	P	SC = 9	EC = 4
B45533A-AB.ADA	P	SC = 7	EC = 2
C45621A.DEP	P	SC = 53	
C45621B.DEP	P	SC = 53	
B48001A-B.ADA	P	SC = 71	EC = 7
B48001B-B.ADA	P	SC = 51	EC = 3
B48001C-AB.ADA	P	SC = 22	EC = 5
B48001D-B.ADA	P	SC = 51	EC = 3
B48002A-B.ADA	P	SC = 25	EC = 6
B48002B-AB.ADA	P	SC = 16	EC = 2
B48002C-B.ADA	P	SC = 31	EC = 9
B48002D-B.ADA	P	SC = 18	EC = 4
B48002E-AB.ADA	P	SC = 42	EC = 10
B48002F-AB.ADA	P	SC = 33	EC = 6
B48002G-AB.ADA	P	SC = 43	EC = 6

B48002I-B.ADA	P	SC = 24	EC = 4
B48002J-B.ADA	P	SC = 48	EC = 12
C48003A-B.ADA	P	SC = 27	
C48003B-B.ADA	P	SC = 28	
C48003C-B.ADA	P	SC = 21	
C48003D-B.ADA	P	SC = 25	
C48003E-B.ADA	P	SC = 32	
C48003F.ADA	P	SC = 15	
C48003G-B.ADA	P	SC = 24	
C48004A-B.ADA	P	SC = 92	
C48005A-B.ADA	P	SC = 17	
C48005B-B.ADA	P	SC = 45	
C48005C-AB.ADA	P	SC = 30	
C48005D-AB.ADA	P	SC = 15	
C4A001A.ADA	P	SC = 49	
D4A002A-AB.ADA	P	SC = 14	
D4A002B.ADA	NA	SC = 14	
C4A003A.ADA	P	SC = 14	
D4A004A-AB.ADA	NA	SC = 16	
D4A004B.ADA	NA	SC = 24	
B4A006A-B.ADA	P	SC = 4	EC = 1
C4A011A.ADA	P	SC = 57	
C4A013A.ADA	P	SC = 14	
B4A016A.ADA	P	SC = 4	EC = 2
B51001A-AB.ADA	P	SC = 29	EC = 6
C51002A-AB.ADA	P	SC = 28	
B51003A-AB.ADA	P	SC = 15	EC = 6
C52001A-B.ADA	P	SC = 92	
C52001B-AB.ADA	P	SC = 21	
C52001C-AB.ADA	P	SC = 15	
B52002A-B.ADA	P	SC = 18	EC = 6
B52002B-AB.ADA	P	SC = 16	EC = 9
B52002C-AB.ADA	P	SC = 26	EC = 8
B52002D-AB.ADA	P	SC = 3	EC = 1
B52002E-AB.ADA	P	SC = 5	EC = 2
B52002F-B.ADA	P	SC = 5	EC = 1
B52002G-AB.ADA	P	SC = 5	EC = 1
B52003A-AB.ADA	P	SC = 7	EC = 3
B52004A-B.ADA	P	SC = 41	EC = 23
B52004B-AB.ADA	P	SC = 19	EC = 11
B52004C-AB.ADA	P	SC = 16	EC = 9
B52004D-AB.DEP	NA	SC = 10	EC = 3
B52004E-AB.DEP	NA	SC = 10	EC = 3
C52005A-AB.ADA	P	SC = 47	
C52005B-AB.ADA	P	SC = 27	
C52005C-AB.ADA	P	SC = 17	
C52005D-AB.ADA	P	SC = 53	
C52005E-AB.ADA	P	SC = 39	
C52005F-AB.ADA	P	SC = 23	
B52006A-AB.ADA	P	SC = 6	EC = 3
C52007A-B.ADA	P	SC = 91	

C52008A-AB.ADA	P	SC = 17	
C52008B-B.ADA	P	SC = 32	
C52009A-B.ADA	P	SC = 18	
C52009B-B.ADA	P	SC = 18	
C52010A-AB.ADA	P	SC = 69	
C52011A-B.ADA	P	SC = 50	
C52011B-AB.ADA	P	SC = 55	
C52102A-AB.ADA	P	SC = 95	
C52102B-AB.ADA	W		
C52103A-AB.ADA	P	SC = 49	
C52103B-AB.ADA	P	SC = 20	
C52103C-AB.ADA	P	SC = 28	
C52103F-AB.ADA	P	SC = 38	
C52103G-AB.ADA	P	SC = 21	
C52103H-AB.ADA	P	SC = 28	
C52103K-AB.ADA	P	SC = 49	
C52103L-AB.ADA	P	SC = 20	
C52103M-AB.ADA	P	SC = 28	
C52103P-AB.ADA	P	SC = 38	
C52103Q-AB.ADA	P	SC = 21	
C52103R-AB.ADA	P	SC = 28	
C52103X-B.ADA	P	SC = 44	
E52103Y-B.ADA	P	SC = 19	
C52104A-AB.ADA	P	SC = 54	
C52104B-AB.ADA	P	SC = 23	
C52104C-AB.ADA	P	SC = 30	
C52104F-AB.ADA	P	SC = 42	
C52104G-AB.ADA	P	SC = 23	
C52104H-AB.ADA	P	SC = 31	
C52104K-AB.ADA	P	SC = 54	
C52104L-AB.ADA	P	SC = 23	
C52104M-AB.ADA	P	SC = 30	
C52104P-AB.ADA	P	SC = 42	
C52104Q-AB.ADA	P	SC = 23	
C52104R-AB.ADA	P	SC = 31	
C52104X-B.ADA	P	SC = 38	
C52104Y-B.ADA	P	SC = 26	
B53001A-AB.ADA	P	SC = 12	EC = 1
B53001B-AB.ADA	P	SC = 9	EC = 1
B53002A-AB.ADA	P	SC = 9	EC = 1
B53002B-AB.ADA	P	SC = 11	EC = 1
B53003A-AB.ADA	P	SC = 17	EC = 4
B53004A-AB.ADA	P	SC = 36	EC = 11
C53004B-B.ADA	P	SC = 21	
C53005A-AB.ADA	P	SC = 79	
C53005B-AB.ADA	P	SC = 79	
C53006A-AB.ADA	P	SC = 56	
C53006B-AB.ADA	P	SC = 56	
C53007A-AB.ADA	P	SC = 68	
C53008A-AB.ADA	P	SC = 66	
B53009A-AB.ADA	P	SC = 20	EC = 3

B54A01A-AB.ADA	P	SC = 4	EC = 1
B54A01B-AB.ADA	P	SC = 4	EC = 1
B54A01C-AB.ADA	P	SC = 6	EC = 1
B54A01D-AB.ADA	P	SC = 6	EC = 1
B54A01E-AB.ADA	P	SC = 7	EC = 1
B54A01F-AB.ADA	P	SC = 4	EC = 1
B54A01G-AB.ADA	P	SC = 4	EC = 1
B54A01H-AB.ADA	P	SC = 4	EC = 1
B54A01I-AB.ADA	P	SC = 4	EC = 1
B54A01J-AB.ADA	P	SC = 4	EC = 1
B54A01K-AB.ADA	P	SC = 6	EC = 1
B54A01L-AB.ADA	P	SC = 20	EC = 6
C54A03A.ADA	P	SC = 48	
C54A04A-AB.ADA	P	SC = 21	
B54A05A.ADA	P	SC = 20	EC = 3
B54A05B.ADA	P	SC = 5	EC = 1
C54A06A-AB.ADA	P	SC = 15	
C54A07A-AB.ADA	P	SC = 26	
B54A08A-B.ADA	P	SC = 14	EC = 2
B54A20A.ADA	P	SC = 63	EC = 21
B54A21A-B.ADA	P	SC = 34	EC = 10
C54A22A-AB.ADA	P	SC = 15	
C54A23A-B.ADA	P	SC = 12	
C54A24A-AB.ADA	P	SC = 21	
C54A24B.ADA	P	SC = 13	
B54A25A-B.ADA	P	SC = 13	EC = 5
C54A26A.ADA	P	SC = 19	
C54A27A-AB.ADA	P	SC = 10	
B54A27B-AB.ADA	P	SC = 6	EC = 1
B54A27D-AB.ADA	P	SC = 6	EC = 1
C54A41A.ADA	P	SC = 42	
C54A42A.ADA	P	SC = 93	
C54A42B.ADA	P	SC = 93	
C54A42C.ADA	P	SC = 53	
C54A42D.ADA	P	SC = 41	
C54A42E.ADA	P	SC = 53	
C54A42F.ADA	P	SC = 57	
C54A42G.ADA	P	SC = 53	
A54B01A-B.ADA	P	SC = 37	
B54B01B-B.TST	P	SC = 32	EC = 7
B54B01C-B.ADA	P	SC = 15	EC = 2
A54B02A-B.ADA	P	SC = 80	
B54B02B-B.ADA	P	SC = 76	EC = 17
B54B02C-B.ADA	P	SC = 26	EC = 3
B54B02D-B.ADA	P	SC = 40	EC = 5
B54B04A-AB.ADA	P	SC = 26	EC = 4
B54B04B-AB.ADA	P	SC = 39	EC = 5
B54B05A-AB.ADA	P	SC = 25	EC = 6
B55A01A-AB.ADA	W		
B55A01B-AB.ADA	P	SC = 5	EC = 1
B55A01C-AB.ADA	P	SC = 5	EC = 1

B55A01D-AB.ADA	P	SC = 5	EC = 1
B55A01E-AB.ADA	P	SC = 5	EC = 1
B55A01F-AB.ADA	P	SC = 4	EC = 1
B55A01G-AB.ADA	P	SC = 4	EC = 1
B55A01H-AB.ADA	P	SC = 4	EC = 1
B55A01I-AB.ADA	P	SC = 4	EC = 1
B55A01J-AB.ADA	P	SC = 4	EC = 1
B55A01K-AB.ADA	P	SC = 4	EC = 1
B55A01L-AB.ADA	P	SC = 4	EC = 1
B55A01M-AB.ADA	P	SC = 4	EC = 1
B55A01N-AB.ADA	P	SC = 5	EC = 1
B55A01O-AB.ADA	P	SC = 5	EC = 1
B55A01P-AB.ADA	P	SC = 4	EC = 1
B55A01Q-AB.ADA	P	SC = 4	EC = 1
B55A01R-AB.ADA	P	SC = 4	EC = 1
B55A01S-AB.ADA	P	SC = 4	EC = 1
B55A01T-AB.ADA	P	SC = 5	EC = 1
B55A01U-AB.ADA	P	SC = 5	EC = 1
B55A01V-AB.ADA	P	SC = 5	EC = 1
D55A03A-AB.ADA	P	SC = 21	
D55A03B-AB.ADA	P	SC = 24	
D55A03C-AB.ADA	P	SC = 32	
D55A03D-AB.ADA	P	SC = 34	
D55A03E-AB.ADA	NA	SC = 53	
D55A03F-AB.ADA	NA	SC = 56	
D55A03G-AB.ADA	NA	SC = 96	
D55A03H-AB.ADA	NA	SC = 98	
B55B01A-AB.ADA	P	SC = 9	EC = 3
B55B01B-AB.ADA	P	SC = 18	EC = 3
C55B03A-AB.ADA	P	SC = 16	
C55B04A-AB.ADA	P	SC = 27	
C55B05A-AB.ADA	P	SC = 114	
C55B06A-AB.ADA	P	SC = 180	
C55B06B-AB.ADA	P	SC = 89	
C55B07A-AB.DEP	NA	SC = 40	
C55B07B-AB.DEP	NA	SC = 40	
C55B08A-B.ADA	P	SC = 30	
C55B09A-AB.ADA	P	SC = 34	
B55B09B-AB.ADA	P	SC = 26	EC = 12
B55B09C-AB.DEP	W		
B55B09D-AB.DEP	W		
A55B12A-AB.ADA	P	SC = 45	
B55B12B-B.ADA	P	SC = 40	EC = 7
B55B12C-AB.ADA	P	SC = 48	EC = 8
A55B13A-AB.ADA	P	SC = 34	
A55B14A-AB.ADA	P	SC = 33	
B55B14B-B.ADA	P	SC = 67	EC = 11
C55B15A-B.ADA	P	SC = 70	
C55B16A-AB.DEP	NA	SC = 23	
B55B18A-B.ADA	P	SC = 14	EC = 4
C55C01A-B.ADA	P	SC = 25	

C55C02A-AB.ADA	P	SC = 11	
C55C02B-AB.ADA	P	SC = 16	
C55C03A-AB.ADA	P	SC = 87	
C55C03B-AB.ADA	P	SC = 87	
C55D01A-AB.ADA	P	SC = 46	
B56001A-AB.ADA	P	SC = 12	EC = 4
D56001B-AB.ADA	P	SC = 75	
B56001C-AB.ADA	P	SC = 3	EC = 1
B56001D-AB.ADA	P	SC = 3	EC = 1
B56001E-AB.ADA	P	SC = 4	EC = 1
B56001F-AB.ADA	P	SC = 4	EC = 1
B56001G-AB.ADA	P	SC = 3	EC = 1
B56001H-AB.ADA	P	SC = 4	EC = 1
C56002A-AB.ADA	P	SC = 40	
B57001A-AB.ADA	P	SC = 21	EC = 5
B57001B-B.ADA	P	SC = 47	EC = 6
B57001C-AB.ADA	P	SC = 28	EC = 5
B57001D-AB.ADA	P	SC = 37	EC = 10
C57002A-AB.ADA	P	SC = 44	
C57003A-AB.ADA	P	SC = 96	
C57004A-AB.ADA	P	SC = 56	
C57004B-AB.ADA	P	SC = 56	
C57004C-AB.ADA	P	SC = 27	
C57005A-B.ADA	P	SC = 27	
B58001A-AB.ADA	P	SC = 11	EC = 2
B58002A-B.ADA	P	SC = 11	EC = 2
B58002B-AB.ADA	P	SC = 10	EC = 2
B58002C-AB.ADA	P	SC = 8	EC = 1
B58003A-B.ADA	P	SC = 10	EC = 1
B58003B-AB.ADA	P	SC = 10	EC = 1
C58004A-AB.ADA	P	SC = 26	
C58004B-AB.ADA	P	SC = 20	
C58004C-AB.ADA	P	SC = 26	
C58004D-AB.ADA	W		
C58004F-AB.ADA	P	SC = 22	
C58004G-AB.ADA	P	SC = 31	
C58005A-AB.ADA	P	SC = 37	
C58005B-AB.ADA	P	SC = 22	
C58005H-AB.ADA	P	SC = 68	
C58006A-AB.ADA	P	SC = 40	
C58006B-AB.ADA	P	SC = 46	
B59001A-AB.ADA	P	SC = 43	EC = 27
C59001B-AB.ADA	P	SC = 39	
B59001C-AB.ADA	P	SC = 34	EC = 21
B59001D-AB.ADA	P	SC = 42	EC = 16
B59001E-AB.ADA	P	SC = 28	EC = 18
B59001F-AB.ADA	P	SC = 51	EC = 25
B59001G-AB.ADA	P	SC = 14	EC = 2
B59001H-AB.ADA	P	SC = 16	EC = 2
B59001I-AB.ADA	P	SC = 41	EC = 17
C59002A-AB.ADA	P	SC = 30	

C59002B-AB.ADA	P	SC = 55	
C59002C-B.ADA	P	SC = 52	
B61001A-AB.ADA	P	SC = 3	EC = 1
B61001B-AB.ADA	P	SC = 3	EC = 1
B61001C-AB.ADA	P	SC = 4	EC = 1
B61001D-AB.ADA	P	SC = 4	EC = 1
B61001E-AB.ADA	P	SC = 4	EC = 1
B61001F-AB.ADA	P	SC = 4	EC = 1
B61001G-AB.ADA	P	SC = 4	EC = 1
B61001H-AB.ADA	P	SC = 5	EC = 1
B61001I-AB.ADA	P	SC = 5	EC = 1
B61001J-AB.ADA	P	SC = 4	EC = 1
B61001K-AB.ADA	P	SC = 4	EC = 1
B61001L-AB.ADA	P	SC = 4	EC = 1
B61001M-AB.ADA	P	SC = 4	EC = 1
B61003A.ADA	P	SC = 7	EC = 1
C61003B.ADA	P	SC = 28	
B61005A-B.ADA	P	SC = 26	EC = 5
B61005B-B.ADA	P	SC = 26	EC = 3
C61008A-B.ADA	P	SC = 67	
C61009A-B.ADA	P	SC = 52	
C61010A-AB.ADA	W		
B62001A.ADA	P	SC = 45	EC = 18
B62001B-AB.ADA	P	SC = 5	EC = 2
B62001C-AB.ADA	P	SC = 4	EC = 2
B62001D-AB.ADA	P	SC = 6	EC = 2
C62002A-B.ADA	P	SC = 67	
C62003A-B.ADA	P	SC = 71	
C62004A.ADA	P	SC = 15	
B63001A.ADA	P	SC = 10	EC = 4
C63004A-AB.ADA	P	SC = 15	
B63005A-AB.ADA	P	SC = 50	EC = 6
B63005B-AB.ADA	P	SC = 27	EC = 4
B64001A-B.ADA	P	SC = 29	EC = 5
B64002A.ADA	P	SC = 27	EC = 9
C64002B-B.ADA	P	SC = 15	
B64003A.ADA	P	SC = 26	EC = 9
B64004A.ADA	P	SC = 29	EC = 10
C64004B.ADA	P	SC = 43	
B64005A-AB.ADA	P	SC = 73	EC = 16
B64006A.ADA	P	SC = 10	EC = 2
C64007A.ADA	P	SC = 18	
B64101A-B.ADA	P	SC = 175	EC = 54
C64104A-AB.ADA	P	SC = 53	
C64104B-AB.ADA	P	SC = 46	
C64104C-AB.ADA	P	SC = 58	
C64104D-AB.ADA	P	SC = 24	
C64104E-AB.ADA	P	SC = 17	
C64104F-AB.ADA	P	SC = 16	
C64104G-AB.ADA	P	SC = 24	
C64104H.ADA	P	SC = 28	

C64104I.ADA	P	SC = 18	
C64104J.ADA	P	SC = 15	
C64104K-AB.ADA	P	SC = 19	
C64104L-AB.ADA	P	SC = 33	
C64104M-AB.ADA	P	SC = 23	
C64105A.ADA	P	SC = 15	
C64105B-AB.ADA	P	SC = 32	
C64105C-AB.ADA	P	SC = 33	
C64105D-AB.ADA	P	SC = 31	
C64106A-B.ADA	P	SC = 124	
C64106B-B.ADA	P	SC = 83	
C64106C-B.ADA	P	SC = 115	
C64106D-B.ADA	P	SC = 97	
C64107A-B.ADA	P	SC = 25	
C64108A-B.ADA	P	SC = 74	
B65001A.ADA	P	SC = 13	EC = 4
B65002A-AB.ADA	P	SC = 8	EC = 1
B65002B-AB.ADA	P	SC = 10	EC = 1
B66001A-B.ADA	P	SC = 67	EC = 12
B66001C.ADA	P	SC = 31	EC = 6
C66002A-B.ADA	P	SC = 27	
C66002C.ADA	P	SC = 27	
C66002D.ADA	P	SC = 23	
C66002E-AB.ADA	P	SC = 21	
C66002F.ADA	P	SC = 19	
C66002G-B.ADA	P	SC = 19	
B67001A-B.ADA	P	SC = 102	EC = 41
B67001B-AB.ADA	P	SC = 75	EC = 11
C67002A.ADA	P	SC = 145	
C67003A-B.ADA	P	SC = 82	
C67003B.ADA	P	SC = 70	
C67003C-AB.ADA	P	SC = 42	
C67003D-B.ADA	P	SC = 54	
C67003E-AB.ADA	P	SC = 22	
C67005A-B.ADA	P	SC = 33	
C67005B-B.ADA	P	SC = 48	
B71001A-AB.ADA	P	SC = 8	EC = 4
B71001B-AB.ADA	P	SC = 6	EC = 1
B71001C-AB.ADA	P	SC = 5	EC = 1
B71001D-AB.ADA	P	SC = 2	EC = 1
B71001E-AB.ADA	P	SC = 6	EC = 2
B71001F-AB.ADA	P	SC = 6	EC = 1
B71001G-AB.ADA	P	SC = 8	EC = 4
B71001H-AB.ADA	P	SC = 6	EC = 1
B71001I-AB.ADA	P	SC = 5	EC = 1
B71001J-AB.ADA	P	SC = 2	EC = 1
B71001K-AB.ADA	P	SC = 6	EC = 2
B71001L-AB.ADA	P	SC = 6	EC = 1
B71001M-AB.ADA	P	SC = 8	EC = 4
B71001N-AB.ADA	P	SC = 6	EC = 1
B71001O-AB.ADA	P	SC = 6	EC = 1

B71001P-AB.ADA	P	SC = 3	EC = 1
B71001Q-AB.ADA	P	SC = 6	EC = 2
B71001R-AB.ADA	P	SC = 3	EC = 1
B71001T-AB.ADA	P	SC = 6	EC = 1
B71001U-AB.ADA	P	SC = 6	EC = 1
B71001V-AB.ADA	P	SC = 3	EC = 1
B71001W-AB.ADA	P	SC = 6	EC = 2
A71002A-AB.ADA	P	SC = 18	
B71002B-AB.ADA	P	SC = 5	EC = 1
A71004A-AB.ADA	P	SC = 64	
A72001A-AB.ADA	P	SC = 14	
C72001B-AB.ADA	P	SC = 25	
B73001A-AB.ADA	P	SC = 17	EC = 3
B73001B-AB.ADA	P	SC = 19	EC = 4
B73001C-B.ADA	P	SC = 6	EC = 1
B73001D-B.ADA	P	SC = 29	EC = 4
B73001E-AB.ADA	P	SC = 23	EC = 4
B73001F-AB.ADA	P	SC = 19	EC = 4
B73001G-B.ADA	P	SC = 6	EC = 1
B73001H-B.ADA	P	SC = 53	EC = 8
C73002A-B.ADA	P	SC = 28	
B73006A-AB.ADA	P	SC = 10	EC = 2
B74001A-AB.ADA	P	SC = 46	EC = 18
B74001B-AB.ADA	P	SC = 39	EC = 14
B74003A-B.ADA	P	SC = 14	EC = 2
A74006A-AB.ADA	P	SC = 64	
B74101A-B.ADA	P	SC = 105	EC = 17
B74102B-B.ADA	P	SC = 40	EC = 18
B74103A-B.ADA	P	SC = 69	EC = 40
B74103B-B.ADA	P	SC = 150	EC = 40
B74103C-B.ADA	P	SC = 71	EC = 40
B74103D-B.ADA	P	SC = 69	EC = 40
B74104A-B.ADA	P	SC = 23	EC = 8
B74105A-B.ADA	P	SC = 28	EC = 8
A74105B-B.ADA	P	SC = 22	
B74105C-B.ADA	P	SC = 26	EC = 4
A74106A-AB.ADA	P	SC = 95	
A74106B-AB.ADA	P	SC = 93	
A74106C-AB.ADA	P	SC = 85	
C74203B-B.ADA	P	SC = 41	
B74205A-B.ADA	W		
B74205B-B.ADA	P	SC = 45	EC = 7
A74205E-B.ADA	P	SC = 54	
A74205F-B.ADA	P	SC = 28	
A74205G-B.ADA	P	SC = 28	
A74205H-B.ADA	P	SC = 28	
C74206A-B.ADA	W		
B74207A-B.ADA	W		
C74209A-AB.ADA	P	SC = 76	
C74210A-AB.ADA	P	SC = 45	
C74211A-B.ADA	P	SC = 73	

C74211B-B.ADA	P	SC = 54	
B74301A-B.ADA	P	SC = 80	EC = 21
B74301B-B.ADA	P	SC = 21	EC = 4
B74301C-B.ADA	P	SC = 22	EC = 4
B74401A-B.ADA	P	SC = 95	EC = 18
C74402A-B.ADA	P	SC = 56	
B74409A-B.ADA	P	SC = 20	EC = 3
C74409B-B.ADA	P	SC = 24	
B83A01A-AB.ADA	P	SC = 16	EC = 6
B83A01B-B.ADA	P	SC = 14	EC = 5
B83A01C.ADA	P	SC = 21	EC = 5
A83A02A.ADA	P	SC = 35	
A83A02B.ADA	P	SC = 30	
B83A05A-AB.ADA	W		
A83A06A-B.ADA	W		
B83A06B-B.ADA	W		
B83A06H-B.ADA	P	SC = 21	EC = 2
B83B01A-AB.ADA	P	SC = 5	EC = 1
C83B02A.ADA	P	SC = 25	
C83B02B.ADA	P	SC = 31	
B83B02C.ADA	P	SC = 10	EC = 2
B83C01A-AB.ADA	P	SC = 38	EC = 15
C83C01B.ADA	P	SC = 37	
A83C01C.ADA	P	SC = 20	
A83C01D.ADA	P	SC = 24	
A83C01E.ADA	P	SC = 33	
A83C01F.ADA	P	SC = 42	
A83C01G.ADA	P	SC = 52	
A83C01H.ADA	P	SC = 22	
A83C01I.ADA	P	SC = 26	
A83C01J.ADA	P	SC = 18	
B83C02A.ADA	P	SC = 27	EC = 8
C83E02A.ADA	P	SC = 29	
C83E02B.ADA	P	SC = 16	
B83E02C-B.ADA	P	SC = 12	EC = 2
C83E03A.ADA	P	SC = 23	
C83E04A.ADA	P	SC = 37	
C83F01A.ADA	P	SC = 24	
C83F01B.ADA	P	SC = 30	
C83F01C0.ADA	PC	SC = 9	
C83F01C1.ADA	PC	SC = 7	
C83F01C2M.ADA	P	SC = 7	
C83F01D0M.ADA	P	SC = 22	
C83F01D1.ADA	PC	SC = 7	
B83F02A.ADA	P	SC = 42	EC = 19
B83F02B.ADA	P	SC = 22	EC = 13
C83F03A.ADA	P	SC =	
C83F03B.ADA	P	SC = 66	
C83F03C0.ADA	PC	SC = 6	
C83F03C1.ADA	PC	SC = 26	
C83F03C2M.ADA	P	SC = 7	

C83F03DOM.ADA	P	SC = 18	
C83F03D1.ADA	PC	SC = 41	
B83F04A-AB.ADA	P	SC = 68	EC = 18
B84001A-AB.ADA	P	SC = 28	EC = 10
B86001A0-AB.ADA	PC	SC = 3	EC = 0
B86001A1M-AB.ADA	P	SC = 3	EC = 1
B86001BOM-B.ADA	P	SC = 3	EC = 0
B86001BA-B.ADA	P	SC = 3	EC = 1
B86001BB-B.ADA	P	SC = 3	EC = 1
B86001BC-B.ADA	P	SC = 3	EC = 1
B86001BD-B.ADA	P	SC = 3	EC = 1
B86001BE-B.ADA	P	SC = 3	EC = 1
B86001BF-B.ADA	P	SC = 3	EC = 1
B86001BG-B.ADA	P	SC = 3	EC = 1
B86001BH-B.ADA	P	SC = 3	EC = 1
B86001BI-B.ADA	P	SC = 3	EC = 1
B86001BJ-B.ADA	P	SC = 3	EC = 1
B86001BK-B.ADA	P	SC = 3	EC = 1
B86001BL-B.ADA	P	SC = 3	EC = 1
B86001BM-B.ADA	P	SC = 3	EC = 1
B86001BO-B.ADA	P	SC = 3	EC = 1
B86001BU-B.ADA	P	SC = 3	EC = 1
B86001BV-B.ADA	P	SC = 2	EC = 1
B86001BW-B.ADA	P	SC = 2	EC = 1
B86001BX-B.ADA	P	SC = 2	EC = 1
B86001COM-AB.DEP	P	SC = 3	EC = 0
B86001CP-AB.DEP	NA	SC = 3	EC = 1
B86001CQ-AB.DEP	NA	SC = 3	EC = 1
B86001CR-AB.DEP	NA	SC = 3	EC = 1
B86001CS-AB.DEP	NA	SC = 3	EC = 1
B86001DOM-AB.TST	P	SC = 3	EC = 0
B86001DT-AB.TST	NA	SC = 3	EC = 1
C86001E-B.ADA	W		
C86002A0.ADA	PC	SC = 3	
C86002A1.ADA	PC	SC = 5	
C86002A2M.ADA	P	SC = 29	
C86002B1.ADA	PC	SC = 4	
C86002B2M.ADA	P	SC = 27	
C86003A-B.ADA	P	SC = 34	
C87A05A-B.ADA	P	SC = 36	
C87A05B-B.ADA	P	SC = 35	
C87B02A-B.ADA	P	SC = 43	
C87B02B-B.ADA	P	SC = 43	
C87B03A-B.ADA	P	SC = 14	
C87B04A-B.ADA	W		
C87B04B-B.ADA	P	SC = 21	
C87B04C-B.ADA	P	SC = 14	
C87B05A-B.ADA	P	SC = 20	
C87B06A-B.ADA	P	SC = 25	
C87B07A-B.ADA	P	SC = 16	
C87B07B-B.ADA	P	SC = 35	

C87B07C-B.ADA	P	SC = 32	
C87B07D-B.ADA	P	SC = 11	
C87B07E-B.ADA	P	SC = 17	
C87B08A-B.ADA	P	SC = 24	
C87B09A-B.ADA	P	SC = 12	
C87B09B-B.ADA	P	SC = 13	
C87B09C-B.ADA	P	SC = 17	
C87B10A-B.ADA	P	SC = 19	
C87B11A-B.ADA	P	SC = 12	
C87B11B-B.ADA	P	SC = 13	
C87B13A-B.ADA	P	SC = 19	
C87B14A-B.ADA	P	SC = 29	
C87B14B-B.ADA	P	SC = 30	
C87B14C-B.ADA	P	SC = 30	
C87B14D-B.ADA	P	SC = 14	
C87B15A-B.ADA	P	SC = 32	
C87B16A-B.ADA	P	SC = 45	
C87B17A-B.ADA	P	SC = 46	
C87B18A-B.ADA	P	SC = 24	
C87B18B-B.ADA	P	SC = 32	
C87B19A-B.ADA	P	SC = 42	
C87B23A-B.ADA	P	SC = 41	
C87B24A-B.ADA	P	SC = 29	
C87B24B-B.ADA	P	SC = 35	
C87B27A-B.ADA	P	SC = 27	
C87B28A-B.ADA	W		
C87B29A-B.ADA	P	SC = 18	
C87B30A-B.ADA	P	SC = 32	
C87B31A-B.ADA	W		
C87B32A-B.ADA	W		
C87B33A-B.ADA	P	SC = 60	
C87B34A-B.ADA	P	SC = 18	
C87B34B-B.ADA	P	SC = 28	
C87B34C-B.ADA	P	SC = 26	
C87B35A-B.ADA	P	SC = 24	
C87B35B-B.ADA	P	SC = 29	
C87B35C-B.ADA	P	SC = 23	
C87B37A-B.ADA	P	SC = 18	
C87B38A-B.ADA	P	SC = 28	
C87B39A-B.ADA	W		
C87B40A-B.ADA	P	SC = 33	
C87B41A-B.ADA	P	SC = 54	
C87B42A-B.ADA	P	SC = 30	
C87B43A-B.ADA	P	SC = 15	
C87B44A-B.ADA	P	SC = 33	
C87B45A-B.ADA	P	SC = 44	
C87B45C-B.ADA	P	SC = 60	
C87B47A-B.ADA	P	SC = 25	
C87B48A-B.ADA	P	SC = 31	
C87B48B-B.ADA	P	SC = 32	
B87B48C-B.ADA	P	SC = 57	EC = 10

C87B54A-B.ADA	P	SC = 29	
C87B57A-B.ADA	P	SC = 47	
C87B62A-B.DEP	NA	SC = 36	
C87B62B-B.DEP	NA	SC = 42	
C87B62C-B.DEP	NA	SC = 36	
B91001A-AB.ADA	P	SC = 6	EC = 1
B91001B-AB.ADA	P	SC = 5	EC = 1
B91001C-AB.ADA	P	SC = 3	EC = 1
B91001D-AB.ADA	P	SC = 2	EC = 1
B91001E-AB.ADA	P	SC = 2	EC = 1
B91001F-AB.ADA	P	SC = 10	EC = 4
B91001G-B.ADA	P	SC = 7	EC = 1
B91002A-B.ADA	P	SC = 7	EC = 1
B91002B-B.ADA	P	SC = 7	EC = 1
B91002C-B.ADA	P	SC = 7	EC = 1
B91002D-B.ADA	P	SC = 7	EC = 1
B91002E-B.ADA	P	SC = 7	EC = 1
B91002F-B.ADA	P	SC = 8	EC = 1
B91002G-B.ADA	P	SC = 7	EC = 1
B91002H-B.ADA	P	SC = 7	EC = 1
B91002I-B.ADA	P	SC = 8	EC = 1
B91002J-B.ADA	P	SC = 7	EC = 1
B91002K-B.ADA	P	SC = 7	EC = 1
B91002L-B.ADA	P	SC = 7	EC = 1
A91002M-B.ADA	P	SC = 16	
B91003A-AB.ADA	P	SC = 34	EC = 6
C92002A.ADA	P	SC = 19	
C92003A.ADA	P	SC = 18	
C93001A-B.ADA	P	SC = 75	
C93002A-B.ADA	P	SC = 76	
C93003A-B.ADA	P	SC = 105	
C94001A-B.ADA	P	SC = 52	
C94002A-B.ADA	P	SC = 74	
C94002B-B.ADA	P	SC = 79	
C94003A-B.ADA	P	SC = 65	
C94004A-B.ADA	P	SC = 36	
C94005A-B.ADA	P	SC = 29	
C94005B-B.ADA	P	SC = 57	
C94006A-B.ADA	P	SC = 82	
C94007A-B.ADA	P	SC = 73	
C94007B-B.ADA	P	SC = 83	
B95001A.ADA	P	SC = 49	EC = 18
B95001B-AB.ADA	P	SC = 28	EC = 12
B95002A.ADA	P	SC = 25	EC = 6
B95004A-AB.ADA	P	SC = 27	EC = 6
B95004B-AB.ADA	P	SC = 37	EC = 8
A95005A.ADA	P	SC = 21	
B95006A.ADA	P	SC = 22	EC = 6
B95006B-AB.ADA	P	SC = 8	EC = 1
B95006C-AB.ADA	P	SC = 8	EC = 1
B95006D-AB.ADA	P	SC = 8	EC = 1

B95007A-AB.ADA	P	SC = 28	EC = 9
B95007B-AB.ADA	P	SC = 22	EC = 6
C95008A.ADA	P	SC = 145	
C95009A.ADA	P	SC = 50	
C95009B.ADA	P	SC = 19	
C95010A.ADA	P	SC = 29	
C95011A.ADA	P	SC = 16	
C95012A-B.ADA	P	SC = 38	
C95013A-B.ADA	P	SC = 30	
B97101A-AB.ADA	P	SC = 21	EC = 7
B97101B-AB.ADA	P	SC = 10	EC = 1
B97101C-AB.ADA	P	SC = 11	EC = 1
B97101D-AB.ADA	P	SC = 11	EC = 1
B97101E-AB.ADA	P	SC = 13	EC = 4
B97102A-AB.ADA	P	SC = 28	EC = 9
B97102B-AB.ADA	P	SC = 10	EC = 1
B97102C-AB.ADA	P	SC = 11	EC = 1
B97102D-AB.ADA	P	SC = 11	EC = 1
B97102E-AB.ADA	P	SC = 11	EC = 1
B97102F-AB.ADA	P	SC = 10	EC = 1
B97102G-AB.ADA	P	SC = 10	EC = 1
B97102H-AB.ADA	P	SC = 12	EC = 1
B97102I-AB.ADA	P	SC = 9	EC = 1
B97103A-AB.ADA	P	SC = 18	EC = 1
B97103B-AB.ADA	P	SC = 14	EC = 1
B97103D-AB.ADA	P	SC = 16	EC = 1
B97103E-AB.ADA	P	SC = 13	EC = 3
B97104A-AB.ADA	P	SC = 3	EC = 1
B97104B-AB.ADA	P	SC = 7	EC = 1
B97104C-AB.ADA	P	SC = 11	EC = 1
B97104D-AB.ADA	P	SC = 12	EC = 1
B97104E-AB.ADA	P	SC = 13	EC = 1
B97104F-AB.ADA	P	SC = 15	EC = 1
B97104G-AB.ADA	P	SC = 9	EC = 1
A97106A-AB.ADA	P	SC = 19	
B97107A-AB.ADA	P	SC = 15	EC = 2
B97108A-AB.ADA	P	SC = 12	EC = 1
B97108B-AB.ADA	P	SC = 12	EC = 1
B97109A-AB.ADA	P	SC = 12	EC = 1
B97110A-AB.ADA	P	SC = 17	EC = 1
B97110B-AB.ADA	P	SC = 17	EC = 1
B97111A-AB.ADA	P	SC = 18	EC = 1
C97113A-B.ADA	P	SC = 43	
C97114A-B.ADA	P	SC = 68	
C97115A-B.ADA	P	SC = 65	
C97201A-AB.ADA	P	SC = 38	
C97201D-AB.ADA	P	SC = 20	
C97201E-AB.ADA	P	SC = 21	
C97201G-AB.ADA	P	SC = 35	
C97201H-AB.ADA	P	SC = 35	
C97201X-AB.ADA	P	SC = 36	

C97202A-AB.ADA	P	SC = 30	
C97203A-AB.ADA	P	SC = 25	
C97203B-AB.ADA	P	SC = 28	
C97204A-B.ADA	P	SC = 29	
C97303A-AB.ADA	P	SC = 27	
C97303B-AB.ADA	P	SC = 30	
C97304A-B.ADA	P	SC = 30	
B99001A-AB.ADA	P	SC = 11	EC = 1
B99001B-B.ADA	P	SC = 10	EC = 1
B99002A-B.ADA	P	SC = 15	EC = 2
B99002B-B.ADA	P	SC = 19	EC = 1
B99002C-B.ADA	P	SC = 23	EC = 4
B99003A-AB.ADA	P	SC = 15	EC = 2
B9A001A-AB.ADA	P	SC = 9	EC = 1
B9A001B-AB.ADA	P	SC = 12	EC = 1
C9A003A-B.ADA	P	SC = 23	
C9A004A-B.ADA	P	SC = 23	
C9A005A-B.ADA	W		
C9A006A-B.ADA	P	SC = 51	
C9A007A-B.ADA	W		
CA1002A0-B.ADA	PC	SC = 2	
CA1002A1-B.ADA	PC	SC = 5	
CA1002A2-B.ADA	PC	SC = 4	
CA1002A3M-B.ADA	P	SC = 45	
CA1002A4-B.ADA	PC	SC = 3	
CA1002A5-B.ADA	PC	SC = 2	
CA1002A6-B.ADA	PC	SC = 3	
CA1002A7-B.ADA	PC	SC = 3	
CA1002A8-B.ADA	PC	SC = 4	
CA1002A9-B.ADA	PC	SC = 3	
CA1003A-AB.ADA	P	SC = 20	
CA1003B-AB.ADA	P	SC = 17	
CA1004A.ADA	P	SC = 19	
CA1005A.ADA	P	SC = 17	
CA1006A-AB.ADA	P	SC = 33	
CA1008A0.ADA	PC	SC = 3	
CA1008A1M.ADA	P	SC = 9	
CA1009A0.ADA	PC	SC = 1	
CA1009A1.ADA	PC	SC = 2	
CA1009A2.ADA	PC	SC = 1	
CA1009A3.ADA	PC	SC = 2	
CA1009A4M.ADA	P	SC = 11	
CA1012A0-B.DEP	NA	SC = 2	
CA1012A1-B.DEP	NA	SC = 2	
CA1012A2-B.DEP	NA	SC = 2	
CA1012A3-B.DEP	NA	SC = 2	
CA1012A4M-B.L	NA	SC = 15	
CA1012B0-B.ADA	PC	SC = 4	
CA1012B2-B.ADA	PC	SC = 4	
CA1012B4M-B.ADA	P	SC = 15	
CA1013A0-AB.ADA	PC	SC = 5	

CA1013A1-AB.ADA	PC	SC = 4	
CA1013A2-AB.ADA	PC	SC = 4	
CA1013A3-B.ADA	PC	SC = 3	
CA1013A4-B.ADA	PC	SC = 3	
CA1013A5-B.ADA	PC	SC = 3	
CA1013A6M-AB.ADA	P	SC = 14	
CA1014A0M-AB.ADA	P	SC = 25	
CA1014A1-AB.ADA	PC	SC = 2	
CA1014A2-AB.ADA	PC	SC = 4	
CA1014A3-AB.ADA	PC	SC = 2	
CA1016A0.ADA	PC	SC = 2	
CA1016A1.ADA	PC	SC = 4	
CA1016A2M.ADA	P	SC = 12	
CA1020A0-B.ADA	PC	SC = 7	
CA1020A1-B.ADA	PC	SC = 5	
CA1020A2-B.ADA	PC	SC = 7	
CA1020A3-B.ADA	PC	SC = 5	
CA1020A4-B.ADA	PC	SC = 8	
CA1020A5-B.ADA	PC	SC = 4	
CA1020A6-B.ADA	PC	SC = 8	
CA1020A7-B.ADA	PC	SC = 4	
CA1020A8M-B.ADA	P	SC = 17	
BA1020B0-B.ADA	PC	SC = 4	EC = 0
BA1020B1-B.ADA	PC	SC = 2	EC = 0
BA1020B2-B.ADA	PC	SC = 3	EC = 0
BA1020B3-B.ADA	PC	SC = 4	EC = 0
BA1020B4-B.ADA	PC	SC = 2	EC = 0
BA1020B5-B.ADA	PC	SC = 2	EC = 0
BA1020B6M-B.ADA	P	SC = 7	EC = 2
BA1101A-AB.ADA	P	SC = 6	EC = 2
BA1101B0M.ADA	P	SC = 6	EC = 0
BA1101B1.ADA	PC	SC = 2	EC = 0
BA1101B2.ADA	PC	SC = 3	EC = 1
BA1101B3.ADA	PC	SC = 3	EC = 0
BA1101B4.ADA	PC	SC = 4	EC = 1
BA1101C0.ADA	PC	SC = 2	EC = 0
BA1101C1M.ADA	P	SC = 3	EC = 1
BA1101D.ADA	P	SC = 3	EC = 1
BA1101E.ADA	P	SC = 4	EC = 1
BA1101H0-B.ADA	PC	SC = 2	EC = 0
BA1101H1M-B.ADA	P	SC = 4	EC = 1
CA1105A0.ADA	PC	SC = 2	
CA1105A1M.ADA	P	SC = 8	
CA1105B0.ADA	PC	SC = 2	
CA1105B1.ADA	PC	SC = 2	
CA1105B2.ADA	PC	SC = 2	
CA1105B3M.ADA	P	SC = 14	
CA1105B4.ADA	PC	SC = 4	
CA1105B5.ADA	PC	SC = 13	
CA1107A0.ADA	PC	SC = 2	
CA1107A1M.ADA	P	SC = 9	

CA1107A2.ADA	PC	SC = 7	
BA2001A-AB.ADA	P	SC = 10	EC = 3
BA2001B.ADA	P	SC = 4	EC = 2
BA2001C.ADA	P	SC = 6	EC = 2
BA2001D.ADA	P	SC = 3	EC = 1
BA2001E.ADA	P	SC = 8	EC = 2
BA2001F0M.ADA	P	SC = 3	EC = 0
BA2001F1.ADA	PC	SC = 3	EC = 0
BA2001F2.ADA	PC	SC = 2	EC = 1
BA2001G0M.ADA	P	SC = 3	EC = 0
BA2001G1.ADA	PC	SC = 2	EC = 1
CA2001H0-B.ADA	PC	SC = 5	
CA2001H1-B.ADA	PC	SC = 2	
CA2001H2-B.ADA	PC	SC = 4	
CA2001H3M-B.ADA	P	SC = 13	
BA2002A0M.ADA	P	SC = 4	EC = 0
BA2002A1.ADA	PC	SC = 7	EC = 0
BA2002A2.ADA	PC	SC = 7	EC = 3
CA2003A0M.ADA	P	SC = 10	
CA2003A1.ADA	PC	SC = 3	
BA2003B0M.ADA	P	SC = 6	EC = 0
BA2003B1.ADA	PC	SC = 2	EC = 1
CA2004A0M.ADA	P	SC = 11	
CA2004A1.ADA	PC	SC = 3	
CA2004A2.ADA	PC	SC = 7	
CA2007A0M-AB.ADA	P	SC = 17	
CA2007A1-AB.ADA	PC	SC = 3	
CA2007A2-AB.ADA	PC	SC = 3	
CA2007A3-AB.ADA	PC	SC = 3	
CA2008A0M-B.ADA	P	SC = 23	
CA2008A1-B.ADA	PC	SC = 2	
CA2008A2-B.ADA	PC	SC = 2	
BA3001A0M-AB.ADA	P	SC = 2	EC = 0
BA3001A1-AB.ADA	PC	SC = 2	EC = 1
BA3001A2-AB.ADA	PC	SC = 2	EC = 1
BA3001A3-AB.ADA	PC	SC = 2	EC = 1
BA3001B0M.ADA	P	SC = 2	EC = 0
BA3001B1.ADA	PC	SC = 2	EC = 1
BA3001C0M-AB.ADA	P	SC = 3	EC = 0
BA3001C1-AB.ADA	PC	SC = 3	EC = 1
BA3001D0M.ADA	P	SC = 4	EC = 1
BA3001D1.ADA	PC	SC = 3	EC = 1
BA3001E0M-AB.ADA	P	SC = 5	EC = 0
BA3001E1-AB.ADA	PC	SC = 2	EC = 1
BA3001E2-AB.ADA	PC	SC = 2	EC = 1
BA3001E3-AB.ADA	PC	SC = 2	EC = 1
BA3001F0M-AB.ADA	P	SC = 6	EC = 0
BA3001F1-AB.ADA	PC	SC = 3	EC = 1
BA3001F2-AB.ADA	PC	SC = 3	EC = 1
BA3001F3-AB.ADA	PC	SC = 3	EC = 1
CA3002A0-B.ADA	PC	SC = 5	

CA3002A1-B.ADA	PC	SC	=	3		
CA3002A2M-B.ADA	P	SC	=	9		
CA3002A3-B.ADA	PC	SC	=	3		
LA3004A0-AB.DEP	W					
LA3004A1-AB.DEP	W					
LA3004A2-AB.DEP	W					
LA3004A3-AB.DEP	W					
LA3004A4-AB.DEP	W					
LA3004A5-AB.DEP	W					
LA3004A6M-AB.DEP	W					
LA3004B0-B.DEP	W					
LA3004B1-B.DEP	W					
LA3004B2-B.DEP	W					
LA3004B3-B.DEP	W					
LA3004B4-B.DEP	W					
LA3004B5-B.DEP	W					
LA3004B6M-B.DEP	W					
LA3006A0-AB.ADA	PC	SC	=	2	EC	= 0
LA3006A1-AB.ADA	PC	SC	=	4	EC	= 0
LA3006A2-AB.ADA	PC	SC	=	3	EC	= 0
LA3006A3-AB.ADA	PC	SC	=	3	EC	= 0
LA3006A4-AB.ADA	PC	SC	=	5	EC	= 0
LA3006A5-AB.ADA	PC	SC	=	2	EC	= 0
LA3006A6M-AB.ADA	P	SC	=	7	EC	= 0
LA3006B0.ADA	PC	SC	=	4	EC	= 0
LA3006B1.ADA	PC	SC	=	3	EC	= 0
LA3006B2.ADA	PC	SC	=	3	EC	= 0
LA3006B3.ADA	PC	SC	=	3	EC	= 0
LA3006B4M.ADA	P	SC	=	6	EC	= 0
CA3006C0-B.ADA	W					
CA3006C1-B.ADA	W					
CA3006C2-B.ADA	W					
CA3006C3-B.ADA	W					
CA3006C4-B.ADA	W					
CA3006C5M-B.ADA	W					
LA3007A0.ADA	PC	SC	=	2	EC	= 0
LA3007A1.ADA	PC	SC	=	4	EC	= 0
LA3007A2.ADA	PC	SC	=	2	EC	= 0
LA3007A3.ADA	PC	SC	=	4	EC	= 0
LA3007A4M.ADA	P	SC	=	6	EC	= 0
LA3007B0-B.ADA	PC	SC	=	1	EC	= 0
LA3007B1-B.ADA	PC	SC	=	5	EC	= 0
LA3007B2-B.ADA	PC	SC	=	4	EC	= 0
LA3007B3-B.ADA	PC	SC	=	5	EC	= 0
LA3007B4-B.ADA	PC	SC	=	3	EC	= 0
LA3007B5-B.ADA	PC	SC	=	2	EC	= 0
LA3007B6-B.ADA	PC	SC	=	1	EC	= 0
LA3007B7-B.ADA	PC	SC	=	4	EC	= 0
LA3007B8M-B.ADA	P	SC	=	7	EC	= 0
LA3008A0.ADA	PC	SC	=	4	EC	= 0
LA3008A1.ADA	PC	SC	=	2	EC	= 0

LA3008A2.ADA	PC	SC = 2	EC = 0
LA3008A3.ADA	PC	SC = 5	EC = 0
LA3008A4.ADA	PC	SC = 2	EC = 0
LA3008A5M.ADA	P	SC = 6	EC = 0
LA3008B0.ADA	PC	SC = 4	EC = 0
LA3008B1.ADA	PC	SC = 5	EC = 0
LA3008B2.ADA	PC	SC = 3	EC = 0
LA3008B3.ADA	PC	SC = 3	EC = 0
LA3008B4.ADA	PC	SC = 6	EC = 0
LA3008B5.ADA	PC	SC = 3	EC = 0
LA3008B6M.ADA	P	SC = 6	EC = 0
LA5001A0-B.ADA	W		
LA5001A1-B.ADA	W		
LA5001A2-B.ADA	W		
LA5001A3-B.ADA	W		
LA5001A4-B.ADA	W		
LA5001A5-B.ADA	W		
LA5001A6M-B.ADA	W		
CA5002A-B.ADA	W		
CA5002B0-B.ADA	W		
CA5002B1-B.ADA	W		
CA5002B2-B.ADA	W		
CA5002B3-B.ADA	W		
CA5002B4-B.ADA	W		
CA5002B5-B.ADA	W		
CA5002B6-B.ADA	W		
CA5002B7M-B.ADA	W		
CA5003A0-B.ADA	PC	SC = 11	
CA5003A1-B.ADA	PC	SC = 5	
CA5003A2-B.ADA	PC	SC = 5	
CA5003A3-B.ADA	PC	SC = 5	
CA5003A4-B.ADA	PC	SC = 5	
CA5003A5-B.ADA	PC	SC = 5	
CA5003A6M-B.ADA	P	SC = 9	
CB1001A-B.ADA	P	SC = 33	
CB1002A.ADA	P	SC = 10	
CB1003A-AB.ADA	P	SC = 25	
CB1004A-AB.ADA	P	SC = 26	
BB2001A-AB.ADA	P	SC = 9	EC = 3
BB2002A-AB.ADA	P	SC = 17	EC = 6
BB2003A-AB.ADA	P	SC = 7	EC = 1
BB2003B-AB.ADA	P	SC = 8	EC = 1
BB2003C-AB.ADA	P	SC = 5	EC = 1
CB2004A-B.ADA	P	SC = 71	
CB2005A-B.ADA	P	SC = 26	
CB2006A-AB.ADA	P	SC = 21	
CB2007A-AB.ADA	P	SC = 40	
BB3001A-B.ADA	P	SC = 37	EC = 9
BB3002A-AB.ADA	P	SC = 12	EC = 3
CB3003A-B.ADA	P	SC = 64	
CB3004A-AB.ADA	P	SC = 52	

BB3005A-AB.ADA	P	SC = 4	EC = 2
CB4001A-AB.ADA	P	SC = 59	
CB4002A-AB.ADA	P	SC = 50	
CB4003A-AB.ADA	P	SC = 35	
CB4004A-B.ADA	P	SC = 26	
CB4005A-AB.ADA	P	SC = 19	
CB4006A-B.ADA	P	SC = 26	
CB4008A-AB.ADA	P	SC = 66	
CB4009A-AB.ADA	P	SC = 51	
BC1001A-B.ADA	P	SC = 36	EC = 9
BC1002A-B.ADA	P	SC = 46	EC = 13
CC1004A-AB.ADA	P	SC = 29	
BC1008A-AB.ADA	P	SC = 5	EC = 1
BC1008B-AB.ADA	P	SC = 4	EC = 1
BC1008C-AB.ADA	P	SC = 3	EC = 1
BC1009A-AB.ADA	P	SC = 33	EC = 11
CC1010A-AB.ADA	P	SC = 18	
CC1010B-AB.ADA	P	SC = 19	
BC1011A-AB.ADA	P	SC = 9	EC = 1
BC1011B-AB.ADA	P	SC = 29	EC = 4
BC1012A-AB.ADA	P	SC = 10	EC = 2
BC1013A-B.ADA	P	SC = 47	EC = 12
BC1101A-AB.ADA	P	SC = 7	EC = 1
BC1102A-B.ADA	P	SC = 26	EC = 8
BC1103A-B.ADA	P	SC = 72	EC = 29
BC1104A-B.ADA	P	SC = 16	EC = 3
BC1104B-B.ADA	P	SC = 15	EC = 4
BC1106A-AB.ADA	P	SC = 8	EC = 1
BC1107A-B.ADA	P	SC = 29	EC = 10
BC1201A-AB.ADA	P	SC = 8	EC = 4
BC1201B-AB.ADA	P	SC = 5	EC = 1
BC1201C-AB.ADA	P	SC = 5	EC = 1
BC1201D-AB.ADA	P	SC = 5	EC = 1
BC1202A-AB.ADA	P	SC = 5	EC = 1
BC1202B-AB.ADA	P	SC = 7	EC = 1
BC1202C-AB.ADA	P	SC = 5	EC = 1
BC1202D-AB.ADA	P	SC = 7	EC = 1
BC1203A-AB.ADA	P	SC = 11	EC = 2
BC1207A-B.ADA	P	SC = 18	EC = 10
CC1220A-B.ADA	P	SC = 20	
BC1226A-B.ADA	P	SC = 94	EC = 29
CC1301A-B.ADA	P	SC = 58	
CC1302A-AB.ADA	P	SC = 60	
BC1303A-AB.ADA	P	SC = 5	EC = 1
BC1303B-AB.ADA	P	SC = 7	EC = 1
BC1303C-AB.ADA	P	SC = 7	EC = 1
BC1303D-AB.ADA	P	SC = 5	EC = 1
BC1303E-AB.ADA	P	SC = 5	EC = 1
CC1304A-AB.ADA	P	SC = 46	
CC1305B-AB.ADA	P	SC = 63	
BC1306A-B.ADA	P	SC = 26	EC = 2

CC1307A-AB.ADA	P	SC = 13	
CC1308A-AB.ADA	P	SC = 37	
CC1310A-AB.ADA	P	SC = 33	
BC2001A-AB.ADA	P	SC = 10	EC = 2
BC2001B-AB.ADA	P	SC = 5	EC = 1
BC2001C-AB.ADA	P	SC = 6	EC = 1
CC2002A-AB.ADA	P	SC = 22	
BC3002A-AB.ADA	P	SC = 13	EC = 3
BC3002B-AB.ADA	P	SC = 9	EC = 3
BC3002C-AB.ADA	P	SC = 8	EC = 2
BC3002D-AB.ADA	P	SC = 9	EC = 3
BC3002E-AB.ADA	P	SC = 10	EC = 3
BC3003A-AB.ADA	P	SC = 15	EC = 3
BC3003B-AB.ADA	P	SC = 17	EC = 3
CC3004A-B.ADA	P	SC = 28	
BC3005A-AB.ADA	P	SC = 21	EC = 6
BC3006A-AB.ADA	P	SC = 17	EC = 4
CC3007A-AB.ADA	P	SC = 53	
CC3011A-B.ADA	P	SC = 60	
BC3011B-B.ADA	P	SC = 21	EC = 2
BC3011C-AB.ADA	P	SC = 11	EC = 3
CC3011D-B.ADA	P	SC = 30	
CC3012A-AB.ADA	P	SC = 119	
BC3013A-AB.ADA	P	SC = 18	EC = 3
BC3101A-B.ADA	P	SC = 131	EC = 36
BC3101B-B.ADA	P	SC = 142	EC = 74
BC3102A-B.ADA	P	SC = 104	EC = 33
BC3102B-B.ADA	P	SC = 104	EC = 33
BC3103A-AB.ADA	P	SC = 60	EC = 12
BC3103B-AB.ADA	P	SC = 12	EC = 1
CC3120A-AB.ADA	P	SC = 85	
CC3120B-B.ADA	P	SC = 66	
CC3125A-B.ADA	P	SC = 32	
BC3201A-B.ADA	P	SC = 21	EC = 5
BC3201B-AB.ADA	P	SC = 21	EC = 5
BC3201C-B.ADA	P	SC = 24	EC = 6
BC3202A-B.ADA	P	SC = 55	EC = 16
BC3202B-B.ADA	P	SC = 52	EC = 16
BC3202C-B.ADA	P	SC = 49	EC = 14
CC3203A-B.ADA	P	SC = 32	
BC3203B-B.ADA	P	SC = 66	EC = 8
BC3204A-B.ADA	P	SC = 45	EC = 12
BC3204B-B.ADA	P	SC = 46	EC = 12
BC3204C0-B.ADA	PC	SC = 5	EC = 0
BC3204C1M-B.ADA	P	SC = 24	EC = 0
BC3204C2-B.ADA	PC	SC = 16	EC = 1
BC3204D-B.ADA	P	SC = 45	EC = 12
BC3204E-B.ADA	P	SC = 42	EC = 8
BC3205A-B.ADA	P	SC = 70	EC = 24
BC3205B-B.ADA	P	SC = 71	EC = 24
BC3205C-B.ADA	P	SC = 71	EC = 24

BC3205D0-B.ADA	PC	SC = 9	EC = 0
BC3205D1M-B.ADA	P	SC = 40	EC = 0
BC3205D2-B.ADA	PC	SC = 13	EC = 1
BC3205E-B.ADA	P	SC = 62	EC = 16
CC3208A-AB.ADA	P	SC = 35	
CC3208B-AB.ADA	P	SC = 37	
BC3301A-AB.ADA	P	SC = 37	EC = 7
BC3301B-AB.ADA	P	SC = 17	EC = 4
BC3302A-AB.ADA	P	SC = 33	EC = 10
BC3302B-AB.ADA	P	SC = 21	EC = 6
BC3303A-AB.ADA	P	SC = 33	EC = 10
BC3304A-AB.ADA	P	SC = 35	EC = 11
CC3305A-AB.ADA	P	SC = 35	
CC3305B-AB.ADA	P	SC = 23	
CC3305C-AB.ADA	P	SC = 23	
CC3305D-AB.ADA	P	SC = 23	
BC3401A-AB.ADA	P	SC = 28	EC = 10
BC3401B-AB.ADA	P	SC = 16	EC = 4
BC3402A-AB.ADA	P	SC = 29	EC = 6
BC3402B-AB.ADA	P	SC = 22	EC = 6
BC3403A-AB.ADA	P	SC = 85	EC = 19
BC3403B-AB.ADA	P	SC = 82	EC = 18
BC3403C-AB.ADA	P	SC = 24	EC = 5
BC3404A-AB.ADA	P	SC = 86	EC = 14
BC3404B-B.ADA	P	SC = 77	EC = 14
BC3404C-AB.ADA	P	SC = 21	EC = 4
BC3404D-AB.ADA	P	SC = 49	EC = 12
BC3404E-AB.ADA	P	SC = 39	EC = 3
BC3404F-AB.ADA	P	SC = 36	EC = 3
BC3405A-AB.ADA	P	SC = 55	EC = 9
BC3405B-B.ADA	P	SC = 40	EC = 12
BC3405D-AB.ADA	P	SC = 61	EC = 8
BC3405E-AB.ADA	P	SC = 64	EC = 8
BC3405F-AB.ADA	P	SC = 42	EC = 4
CC3406A-AB.ADA	P	SC = 21	
CC3406B-AB.ADA	P	SC = 22	
CC3406C-AB.ADA	P	SC = 27	
CC3406D-B.ADA	P	SC = 23	
CC3407A-AB.ADA	P	SC = 35	
CC3407B-AB.ADA	NA	SC = 34	
CC3407C-AB.ADA	NA	SC = 35	
CC3407D-AB.ADA	P	SC = 55	
CC3407E-AB.ADA	P	SC = 30	
CC3407F-AB.ADA	P	SC = 21	
CC3408A-AB.ADA	P	SC = 21	
CC3408B-AB.ADA	P	SC = 22	
CC3408C-AB.ADA	P	SC = 27	
CC3408D-B.ADA	P	SC = 22	
BC3501A-AB.ADA	P	SC = 23	EC = 4
BC3501B-AB.ADA	P	SC = 18	EC = 4
BC3501C-AB.ADA	P	SC = 32	EC = 5

BC3501D-AB.ADA	P	SC = 27	EC = 5
BC3501E-AB.ADA	P	SC = 30	EC = 4
BC3501F-AB.ADA	P	SC = 30	EC = 3
BC3501G-AB.ADA	P	SC = 73	EC = 9
BC3501H-AB.ADA	P	SC = 62	EC = 9
BC3501I-AB.ADA	P	SC = 17	EC = 3
BC3501J-AB.ADA	P	SC = 13	EC = 2
BC3501K-AB.ADA	P	SC = 15	EC = 2
BC3502A-AB.ADA	P	SC = 25	EC = 4
BC3502B-AB.ADA	P	SC = 49	EC = 13
BC3502C-AB.ADA	P	SC = 72	EC = 16
BC3502D-AB.ADA	P	SC = 117	EC = 25
BC3502E-AB.ADA	P	SC = 103	EC = 17
BC3502F-AB.ADA	P	SC = 36	EC = 7
BC3502G-AB.ADA	P	SC = 44	EC = 13
BC3502H-AB.ADA	P	SC = 62	EC = 13
BC3502I-AB.ADA	P	SC = 83	EC = 19
BC3502J-AB.ADA	P	SC = 85	EC = 16
BC3502K-AB.ADA	P	SC = 12	EC = 2
BC3502L-AB.ADA	P	SC = 19	EC = 5
BC3502M-AB.ADA	P	SC = 15	EC = 3
BC3502N-AB.ADA	P	SC = 26	EC = 3
BC3502O-AB.ADA	P	SC = 28	EC = 3
BC3503A-B.ADA	P	SC = 62	EC = 12
BC3503B-B.ADA	P	SC = 43	EC = 8
BC3503C-B.ADA	P	SC = 21	EC = 4
BC3503D-B.ADA	P	SC = 34	EC = 6
BC3503F-B.ADA	P	SC = 18	EC = 3
CC3504A-B.ADA	P	SC = 43	
CC3504B-B.ADA	P	SC = 48	
CC3504C-B.ADA	P	SC = 57	
CC3504D-B.ADA	P	SC = 33	
CC3504E-B.ADA	P	SC = 40	
CC3504F-B.ADA	P	SC = 45	
CC3504G-B.ADA	P	SC = 54	
CC3504H-B.ADA	P	SC = 35	
CC3504I-B.ADA	P	SC = 29	
CC3504J-B.ADA	P	SC = 30	
CC3504K-B.ADA	P	SC = 30	
CC3601C-AB.ADA	P	SC = 75	
CC3602A-AB.ADA	P	SC = 36	
AE2101A-B.ADA	W		
AE2101B-B.ADA	P	SC = 15	
AE2101C-B.DEP	NA	SC = 19	
AE2101D-B.ADA	P	SC = 15	
BE2101E-B.ADA	P	SC = 42	EC = 16
CE2102A-B.DEP	P	SC = 73	
CE2102B-B.DEP	P	SC = 71	
CE2102C-B.DEP	P	SC = 52	
CE2102D-B.DEP	NA	SC = 63	
CE2102E-B.DEP	NA	SC = 63	

CE2102F-B.DEP	NA	SC = 34	
CE2102G-B.DEP	NA	SC = 64	
CE2103A-B.TST	P	SC = 92	
CE2103B-B.TST	P	SC = 92	
CE2104A-B.ADA	P	SC = 61	
CE2104B-B.ADA	P	SC = 68	
CE2105A-B.ADA	P	SC = 29	
CE2106A-B.DEP	P	SC = 59	
CE2107A-B.DEP	P	SC = 33	
CE2107B-B.DEP	P	SC = 36	
CE2107C-B.DEP	P	SC = 37	
CE2107D-B.DEP	P	SC = 43	
CE2107E-B.DEP	P	SC = 34	
CE2108A-B.ADA	P	SC = 22	
CE2108B-B.DEP	P	SC = 20	
CE2108C-B.ADA	P	SC = 19	
CE2108D-B.ADA	P	SC = 29	
CE2108E-B.ADA	P	SC = 19	
CE2108F-B.ADA	P	SC = 29	
CE2109A-B.ADA	P	SC = 36	
CE2110A-B.ADA	P	SC = 45	
CE2110B-B.DEP	P	SC = 48	
CE2111A-B.ADA	P	SC = 73	
CE2111B-B.ADA	P	SC = 53	
CE2111C-B.ADA	P	SC = 93	
CE2111D-B.DEP	P	SC = 75	
BE2112A-B.ADA	P	SC = 48	EC = 33
BE2112B-B.ADA	P	SC = 19	EC = 10
BE2112C-B.ADA	P	SC = 26	EC = 13
BE2114A-B.ADA	P	SC = 18	EC = 3
CE2201A-B.DEP	P	SC = 119	
CE2201B-B.ADA	P	SC = 104	
CE2201C-B.DEP	P	SC = 51	
CE2201D-B.DEP	NA	SC = 36	
CE2201E-B.DEP	NA	SC = 82	
CE2201F-B.DEP	P	SC = 36	
BE2208A-B.ADA	P	SC = 12	EC = 3
CE2210A-B.DEP	P	SC = 26	
CE2401A-B.DEP	P	SC = 103	
CE2401B-B.DEP	P	SC = 104	
CE2401C-B.ADA	W		
CE2401D-B.DEP	NA	SC = 89	
CE2401E-B.ADA	P	SC = 85	
CE2401F-B.DEP	P	SC = 47	
CE2402A-B.ADA	P	SC = 65	
CE2404A-B.DEP	P	SC = 34	
CE2405B-B.DEP	P	SC = 21	
CE2406A-B.DEP	P	SC = 34	
CE2407A-B.ADA	P	SC = 32	
CE2408A-B.DEP	P	SC = 30	
CE2409A-B.DEP	P	SC = 26	

CE2410A-B.DEP	P	SC = 27	
BE3001A-B.ADA	P	SC = 10	EC = 4
BE3002A-B.ADA	P	SC = 19	EC = 5
CE3002B-B.TST	P	SC = 25	
CE3002C-B.TST	P	SC = 20	
CE3002D-B.ADA	P	SC = 18	
BE3002E-B.ADA	P	SC = 9	EC = 3
CE3002F-B.ADA	P	SC = 13	
AE3101A-B.ADA	P	SC = 31	
CE3102A-B.ADA	P	SC = 75	
CE3102B-B.TST	P	SC = 50	
EE3102C-B.ADA	P	SC = 35	
CE3103A-B.ADA	P	SC = 45	
CE3104A-B.ADA	P	SC = 81	
BE3105A-B.ADA	P	SC = 5	EC = 1
CE3107A-B.TST	P	SC = 91	
CE3108A-B.ADA	P	SC = 36	
CE3108B-B.ADA	P	SC = 41	
CE3109A-B.ADA	P	SC = 16	
CE3110A-B.DEP	P	SC = 31	
CE3111A-B.DEP	P	SC = 34	
CE3111B-B.DEP	P	SC = 34	
CE3111C-B.DEP	P	SC = 41	
CE3112A-B.ADA	P	SC = 15	
CE3112B-B.ADA	P	SC = 21	
CE3114A-B.ADA	P	SC = 24	
CE3114B-B.DEP	P	SC = 26	
CE3115A-B.DEP	P	SC = 34	
CE3201A-B.ADA	P	SC = 18	
CE3202A-B.ADA	P	SC = 15	
CE3203A-B.ADA	P	SC = 50	
BE3205A-B.ADA	P	SC = 11	EC = 8
CE3206A-B.ADA	P	SC = 18	
CE3208A-B.ADA	P	SC = 40	
CE3301A-B.ADA	P	SC = 35	
CE3301B-B.ADA	P	SC = 55	
CE3301C-B.ADA	P	SC = 31	
CE3302A-B.ADA	P	SC = 37	
CE3303A-B.ADA	P	SC = 30	
CE3305A-B.ADA	P	SC = 42	
CE3402A-B.ADA	P	SC = 26	
CE3402B-B.ADA	P	SC = 42	
CE3402C-B.ADA	P	SC = 35	
CE3402D-B.ADA	P	SC = 25	
CE3402E-B.ADA	P	SC = 18	
CE3403A-B.ADA	P	SC = 26	
CE3403B-B.ADA	P	SC = 54	
CE3403C-B.ADA	P	SC = 32	
CE3403D-B.ADA	P	SC = 28	
CE3403E-B.ADA	P	SC = 43	
CE3403F-B.ADA	P	SC = 46	

CE3404A-B.ADA	P	SC = 31	
CE3404B-B.ADA	P	SC = 36	
CE3404C-B.ADA	P	SC = 70	
CE3405A-B.ADA	P	SC = 38	
CE3405B-B.ADA	P	SC = 27	
CE3405C-B.ADA	P	SC = 30	
CE3405D-B.ADA	P	SC = 32	
CE3406A-B.ADA	P	SC = 42	
CE3406B-B.ADA	P	SC = 30	
CE3406C-B.ADA	P	SC = 44	
CE3406D-B.ADA	P	SC = 28	
CE3407A-B.ADA	P	SC = 51	
CE3407B-B.ADA	P	SC = 26	
CE3407C-B.ADA	P	SC = 31	
CE3408A-B.ADA	P	SC = 49	
CE3408B-B.ADA	P	SC = 41	
CE3408C-B.ADA	P	SC = 31	
CE3409A-B.ADA	P	SC = 23	
CE3409B-B.ADA	P	SC = 32	
CE3409C-B.ADA	P	SC = 68	
CE3409D-B.ADA	P	SC = 39	
CE3409E-B.ADA	P	SC = 29	
CE3409F-B.ADA	P	SC = 26	
CE3410A-B.ADA	P	SC = 23	
CE3410B-B.ADA	P	SC = 32	
CE3410C-B.ADA	P	SC = 66	
CE3410D-B.ADA	P	SC = 32	
CE3410E-B.ADA	P	SC = 31	
CE3410F-B.ADA	P	SC = 28	
CE3411A-B.ADA	P	SC = 63	
CE3411C-B.ADA	P	SC = 49	
CE3412A-B.ADA	P	SC = 50	
CE3412C-B.ADA	P	SC = 54	
CE3413A-B.ADA	P	SC = 35	
CE3413C-B.ADA	P	SC = 49	
BE3501A-B.ADA	P	SC = 8	EC = 4
CE3601A-B.ADA	P	SC = 45	
CE3602A-B.DEP	P	SC = 55	
CE3602B-B.DEP	P	SC = 54	
CE3602C-B.DEP	P	SC = 56	
CE3602D-B.DEP	P	SC = 48	
CE3603A-B.ADA	P	SC = 102	
CE3604A-B.DEP	P	SC = 116	
CE3605A-B.DEP	P	SC = 24	
CE3605B-B.DEP	P	SC = 46	
CE3605C-B.DEP	P	SC = 55	
CE3605D-B.ADA	P	SC = 60	
CE3605E-B.DEP	P	SC = 34	
CE3606A-B.DEP	P	SC = 30	
CE3606B-B.DEP	P	SC = 20	
BE3606C-B.ADA	P	SC = 6	EC = 1

CE3701A-B.ADA	P	SC = 42	
AE3702A-B.DEP	P	SC = 21	
BE3703A-B.ADA	P	SC = 23	EC = 8
CE3704A-B.DEP	P	SC = 40	
CE3704B-B.DEP	P	SC = 31	
CE3704C-B.ADA	P	SC = 24	
CE3704D-B.DEP	P	SC = 54	
CE3704E-B.ADA	P	SC = 44	
CE3704F-B.ADA	P	SC = 47	
CE3706C-B.ADA	P	SC = 41	
CE3706F-B.ADA	P	SC = 34	
CE3706G-B.ADA	P	SC = 24	
CE3707A-B.DEP	P	SC = 53	
AE3709A-B.ADA	P	SC = 20	
CE3801A-B.DEP	P	SC = 39	
BE3802A-B.ADA	P	SC = 25	EC = 7
BE3803A-B.ADA	P	SC = 27	EC = 12
CE3804A-B.DEP	P	SC = 61	
CE3804B-B.DEP	P	SC = 61	
CE3804C-B.DEP	P	SC = 64	
CE3804D-B.ADA	P	SC = 54	
CE3804E-B.ADA	P	SC = 53	
CE3804F-B.ADA	P	SC = 30	
CE3804G-B.DEP	P	SC = 79	
CE3804I-B.DEP	P	SC = 54	
CE3805A-B.DEP	P	SC = 67	
CE3805B-B.DEP	P	SC = 68	
CE3806A-B.DEP	P	SC = 44	
CE3806C-B.ADA	P	SC = 60	
CE3806D-B.DEP	P	SC = 64	
CE3806E-B.ADA	P	SC = 91	
CE3809A-B.DEP	P	SC = 86	
CE3809B-B.DEP	P	SC = 86	
CE3810A-B.DEP	P	SC = 42	
CE3901A-B.DEP	P	SC = 23	
BE3902A-B.ADA	P	SC = 24	EC = 3
BE3903A-B.ADA	P	SC = 27	EC = 12
CE3905A-B.DEP	P	SC = 38	
CE3905B-B.DEP	P	SC = 31	
CE3905C-B.DEP	P	SC = 71	
CE3906A-B.DEP	P	SC = 34	
CE3906B-B.DEP	P	SC = 31	
CE3906C-B.DEP	P	SC = 37	
CE3906D-B.ADA	P	SC = 24	
CE3906E-B.DEP	P	SC = 31	
CE3906F-B.ADA	P	SC = 41	
CE3907A-B.DEP	P	SC = 25	
CE3908A-B.DEP	P	SC = 29	
REPORT_SPEC-AB.ADA	P	SC = 11	
REPORT_BODY-B.ADA	P	SC = 81	
CHECK_FILE-B.ADA	P	SC = 68	

VAR_STRINGS_SPEC.ADA	P	SC = 123
VAR_STRINGS_BODY.ADA	NA	SC = 396
CZ1101A-AB.ADA	P	SC = 23
CZ1102A-AB.ADA	P	SC = 15
CZ1103A-B.ADA	P	SC = 85
CZ1201A-AB.ADA	NA	SC = 77
CZ1201B-AB.ADA	NA	SC = 97
CZ1201C-AB.ADA	NA	SC = 148
CZ1201D-AB.ADA	NA	SC = 140

Timing information was collected for the TeleSoft Callan Unistar 300 validation for a subset of the test files. Timing information was collected for compilation and execution times. The timing information is summarized by the following resource parameters:

user time(U)	Number of seconds of CPU time devoted to user process.
system time(S)	Number of seconds of CPUtime consumed by the kernal on behalf of the user's process.
elapsed time(E)	Elapsed (wallclock) time for the command.
percentage of CPU time versus elapsed time (P)	Total CPU time (U + S) as a percentage of elapsed time.

The following test files represent a sample of timing information for the TeleSoft Callan validation.

test file		U	S	E	P
A32203B	compilation	47.2	48.4	4:48	33
	execution	3.4	2.8	0:17	35
A32203C	compilation	45.9	47.9	4:42	33
	execution	3.6	2.9	0:17	38
A32203D	compilation	55.8	56.7	5:01	37
	execution	3.7	3.0	0:21	31
A34008B	compilation	49.2	47.2	4:48	33
	execution	3.6	3.0	0:17	38
A71002A	compilation	45.3	49.1	5:04	31
	execution	3.7	2.7	0:17	37
A71004A	compilation	54.0	48.0	4:30	37
	execution	3.4	2.8	0:17	36
A72001A	compilation	44.8	49.4	4:44	33
	execution	3.3	3.1	0:17	37
A74006A	compilation	54.2	49.2	4:36	37
	execution	3.4	3.1	0:17	38

test file		U	S	E	P
A74105B	compilation	46.4	50.9	7:17	22
	execution	3.6	2.7	0:18	34
A74106A	compilation	76.5	51.0	5:28	38
	execution	3.4	2.8	0:17	36
A74106B	compilation	54.4	49.2	4:59	34
	execution	3.4	3.2	0:17	38
A74106C	compilation	53.2	50.8	4:57	35
	execution	3.6	2.8	0:16	39
A74205E	compilation	56.0	50.5	4:56	35
	execution	3.7	3.0	0:18	37
A74205F	compilation	48.9	49.2	4:51	33
	execution	3.9	2.5	0:17	37
A74205G	compilation	49.4	49.8	4:51	34
	execution	3.8	3.3	0:18	39
A74205H	compilation	49.8	49.9	4:50	34
	execution	3.8	2.7	0:17	37
C92002A	compilation	46.2	50.2	5:16	30
	execution	3.5	3.7	0:17	42
C92003A	compilation	46.3	51.5	4:28	36
	execution	3.4	2.7	0:17	35
C93001A	compilation	67.5	59.2	5:06	41
	execution	3.9	2.9	0:18	37
C93002A	compilation	66.8	61.3	5:12	41
	execution	3.9	3.4	0:18	40
C93003A	compilation	74.2	59.9	5:11	43
	execution	4.3	3.1	0:18	41
C94001A	compilation	63.1	61.6	5:31	37
	execution	20.9	3.2	0:35	68
C94002A	compilation	67.0	61.9	4:56	43
	execution	21.0	2.7	0:36	65

test file		U	S	E	P
C94002B	compilation	66.7	60.0	4:47	44
	execution	20.7	3.5	0:35	69
C94003A	compilation	63.3	59.3	5:24	37
	execution	3.9	3.1	0:19	37
C94004A	compilation	126.5	124.7	8:28	49
	execution	4.1	3.6	0:19	40
C94005A	compilation	126.2	127.7	8:06	52
	execution	4.9	3.2	0:20	40
C94005B	compilation	199.8	201.0	12:06	55
	execution	21.3	3.5	0:36	68
C94006A	compilation	66.7	60.9	5:03	42
	execution	3.9	4.0	0:17	45
C94007A	compilation	64.7	61.3	4:58	42
	execution	4.3	2.8	0:18	39
C94007B	compilation	65.3	59.2	4:58	41
	execution	4.3	3.5	0:19	41
C95008A	compilation	68.9	50.6	4:53	40
	execution	4.0	3.2	0:18	40
C95009A	compilation	50.5	51.6	4:58	34
	execution	3.4	2.8	0:22	28
C95009B	compilation	45.8	52.3	4:47	34
	execution	3.4	2.5	0:17	34
C95010A	compilation	47.5	51.4	4:35	35
	execution	3.6	2.9	0:17	38
C95011A	compilation	46.5	50.8	4:41	34
	execution	3.5	2.8	0:17	37
CB1001A	compilation	50.1	51.2	5:11	32
	execution	3.5	3.7	0:18	39
CB1002A	compilation	45.8	52.3	5:09	31
	execution	3.5	2.8	0:17	36
CB1003A	compilation	47.3	52.6	4:33	36
	execution	3.4	3.7	0:18	39

test file		U	S	E	P
CB1004A	compilation	47.9	51.2	4:11	39
	execution	3.4	3.0	0:18	35
CB2004A	compilation	62.3	53.4	5:20	36
	execution	4.0	2.9	0:18	38
CB2005A	compilation	46.7	51.4	4:46	34
	execution	3.4	3.7	0:18	39
CB2006A	compilation	47.0	50.7	4:30	36
	execution	3.5	3.1	0:17	38
CB2007A	compilation	49.2	51.3	4:26	37
	execution	3.3	2.7	0:18	33
CB3003A	compilation	53.6	51.1	4:55	35
	execution	3.9	3.6	0:18	41
CB3004A	compilation	54.0	52.2	4:53	36
	execution	3.8	3.2	0:17	40
CB4001A	compilation	53.4	52.2	4:54	35
	execution	3.8	3.5	0:18	40
CB4002A	compilation	51.0	52.7	4:56	35
	execution	3.5	3.1	0:18	36
CB4003A	compilation	48.1	54.4	4:43	36
	execution	3.6	3.3	0:18	38
CC1004A	compilation	47.3	51.9	5:40	29
	execution	3.5	3.4	0:18	38
CC1010A	compilation	45.8	52.2	4:34	35
	execution	3.6	2.8	0:18	35
CC1010B	compilation	45.3	53.4	4:34	36
	execution	3.4	2.8	0:17	36
CC1220A	compilation	50.1	51.3	4:54	34
	execution	3.4	2.7	0:18	33

test file		U	S	E	P
CC1301A	compilation	58.0	52.3	4:47	38
	execution	3.4	3.2	0:18	36
CC1302A	compilation	73.2	54.6	5:56	35
	execution	3.5	2.9	0:18	35

END

FILMED

11-84

DTIC